

**EPA Superfund  
Record of Decision:**

**NATIONAL PRESTO INDUSTRIES, INC.  
EPA ID: WID006196174  
OU 02  
EAU CLAIRE, WI  
08/01/1990**

1) IN THE SOUTHEAST PORTION OF THE SITE, A SANDSTONE RIDGE RISES ABOVE THE GLACIAL OUTWASH TERRACE. THAT RIDGE MAY BE CAPPED BY THE EAU CLAIRE FORMATION, A CAMBRIAN SANDSTONE THAT IS YOUNGER THAN THE MOUNT SIMON SANDSTONE; AND 2) GLACIAL OUTWASH SAND AND GRAVEL DIRECTLY OVERLIES PRECAMBRIAN ROCK IN A BURIED PREGLACIAL VALLEY BENEATH THE NORTHWESTERN PORTION OF THE SITE. DEPTH TO BEDROCK VARIES BUT GENERALLY INCREASES FROM NEAR THE SURFACE IN THE SOUTHEASTERN PORTION OF THE SITE TO GREATER THAN 100 FEET IN THE BURIED VALLEY. FIGURE 4 ILLUSTRATES THE APPROXIMATE LOCATION AND TREND OF THE BURIED VALLEY.

2) IN THE SOUTHEAST PORTION OF THE SITE WHERE OUTWASH SAND AND GRAVEL IS ABSENT AND IN AREAS WHERE OUTWASH IS ABOVE THE WATER TABLE, GROUNDWATER OCCURS IN SANDSTONE. IN A LARGE PORTION OF THE SITE, GROUNDWATER OCCURS IN BOTH SANDSTONE AND SAND AND GRAVEL AQUIFERS. IN THE BURIED VALLEY, GROUNDWATER OCCURS ONLY IN THE SAND AND GRAVEL DUE TO THE FACT THAT A PREGLACIAL RIVER REMOVED THE SANDSTONE OVERLYING THE PRECAMBRIAN IGNEOUS AND METAMORPHIC ROCK. DEPTH TO GROUNDWATER VARIES FROM APPROXIMATELY 40-50 FEET IN THE SOUTHEASTERN PORTION OF THE SITE (WATER TABLE IS IN SANDSTONE) TO 70-80 FEET IN THE AFFECTED AREA WHERE THE WATER TABLE IS GENERALLY IN THE SAND AND GRAVEL. THE MAJORITY OF PRIVATE WELLS IN THE AFFECTED AREA ARE FINISHED IN THE SAND AND GRAVEL AQUIFER.

3) GROUNDWATER GENERALLY FLOWS FROM THE SOUTHEASTERN PORTION OF THE SITE TOWARDS THE NORTHWEST. THE PREGLACIAL BURIED VALLEY IS A MAJOR INFLUENCE ON GROUNDWATER FLOW. GROUNDWATER IN THE AREA FLOWS INTO THE BURIED VALLEY FROM SOUTHEASTERLY AND NORTHWESTERLY DIRECTIONS. A GROUNDWATER DIVIDE EXISTS IN THE BURIED VALLEY IN THE VICINITY OF THE JUNCTION OF HIGHWAY 53, MELBY ROAD AND COUNTY HIGHWAY "J." WATER NORTH OF THE DIVIDE FLOWS INTO LAKE HALLIE. SOUTH OF THE DIVIDE, IT FLOWS WESTERLY TOWARD THE EAU CLAIRE WELL FIELD. THE LOCATION OF THE DIVIDE HAS PROBABLY VARIED OVER TIME DUE TO PERIODS OF HIGH AND LOW PRECIPITATION AND PUMPING OF WELLS NEAR THE DIVIDE.

4) ORGANIC AND INORGANIC CONTAMINANTS HAVE BEEN DETECTED IN SOILS, SOIL VAPOR AND WASTES AT THE SITE. ORGANIC CONTAMINANTS INCLUDE THE VOCs 1,1,1-TRICHLOROETHANE, TRICHLOROETHENE, 1,1-DICHLOROETHANE, 1,1-DICHLOROETHENE AND TETRACHLOROETHENE. ON-SITE SOURCES INCLUDE, BUT ARE NOT NECESSARILY LIMITED TO, THE MELBY ROAD SITE, EAST DISPOSAL AREA, DRY WELLS, LAGOON NO. 1 AND DITCH NO. 3 (SEE FIGURE 2-SITE MAP).

5) GROUNDWATER CONTAMINATION BY ORGANIC AND INORGANIC COMPOUNDS IS THE RESULT OF PAST WASTE DISPOSAL PRACTICES AT THE MELBY ROAD SITE, EAST DISPOSAL AREA, LAGOON NO. 1, DITCH NO. 3 AND SEVERAL OF THE DRY WELLS. THE PRIMARY CONTAMINANTS OF CONCERN IN GROUNDWATER ARE VOCs WHICH INCLUDE 1,1,1-TRICHLOROETHANE, TRICHLOROETHENE, 1,1-DICHLOROETHANE, 1,1-DICHLOROETHENE, TETRACHLOROETHENE AND 1,2-DICHLOROETHENE.

6) ANALYSIS OF GROUNDWATER SAMPLES COLLECTED FROM ON-SITE MONITORING WELLS DOWNGRAIENT OF THE MELBY ROAD SITE INDICATE THE PRESENCE OF 1,1,1-TRICHLOROETHANE, TETRACHLOROETHENE AND 1,1-DICHLOROETHENE AT CONCENTRATIONS ABOVE THE WISCONSIN GROUNDWATER ENFORCEMENT STANDARDS OF 200 PARTS PER BILLION (PPB), 1.0 PPB AND 0.24 PPB, RESPECTIVELY.

WISCONSIN GROUNDWATER PREVENTIVE ACTION LIMITS ARE ALSO EXCEEDED FOR 1,1,1-TRICHLOROETHANE (40 PPB), TETRACHLOROETHENE (.1 PPB), TRICHLOROETHENE (.18 PPB) AND 1,1-DICHLOROETHENE (.024 PPB).

1,1,1-TRICHLOROETHANE WAS DETECTED AT CONCENTRATIONS ABOVE THE FEDERAL MAXIMUM CONTAMINANT LEVEL (MCL) OF 200 PPB.

7) ANALYSIS OF GROUNDWATER SAMPLES COLLECTED FROM ON-SITE MONITORING WELLS DOWNGRAIENT OF THE EAST DISPOSAL AREA INDICATE THE PRESENCE OF TRICHLOROETHENE AT CONCENTRATIONS ABOVE THE WISCONSIN GROUNDWATER ENFORCEMENT STANDARD OF 1.8 PPB AND THE GROUNDWATER PREVENTIVE ACTION LIMIT OF .18 PPB.

8) AT A MINIMUM, THREE DISTINCT GROUNDWATER CONTAMINATION PLUMES ARE PRESENT AT THE SITE; TWO OF WHICH ARE KNOWN TO HAVE MOVED OFF SITE AND CONTAMINATED PRIVATE DRINKING WATER WELLS IN DIFFERENT PORTIONS OF THE AFFECTED AREA. FIGURE 5 ILLUSTRATES THE APPROXIMATE DISTRIBUTION OF CONTAMINATION IN THE AFFECTED AREA AND WEST OF THE SITE. PLUME 3 EXTENDS FROM THE MELBY ROAD SITE AND PLUME 5 ORIGINATES AT THE EAST DISPOSAL AREA. BOTH PLUMES MOVE THROUGH THE AFFECTED AREA AND DISCHARGE TO LAKE HALLIE, WHERE VOCs HAVE ALSO BEEN DETECTED. THE ORIGIN OF A THIRD AREA OF CONTAMINATION, IDENTIFIED AS PLUME 4 ON FIGURE 5, IS UNCERTAIN AND MAY BE ATTRIBUTED TO PAST RELEASE(S) AT NPI, LOCALIZED OFF-SITE SOURCE(S), OR A COMBINATION OF THE TWO. (PLUME 2 DOES NOT IMPACT THE AFFECTED AREA BUT IS OF SIGNIFICANCE BECAUSE IT EXTENDS FROM SOURCES AT THE SITE TOWARD THE EAU CLAIRE WELL FIELD).

9) ANALYSIS OF SAMPLES COLLECTED FROM PRIVATE DRINKING WATER WELLS IN THE TOWN OF HALLIE, WHICH IS HYDRAULICALLY DOWNGRADIENT OF THE MELBY ROAD SITE AND EAST DISPOSAL AREA, INDICATE THE PRESENCE OF TRICHLOROETHENE AND 1,1-DICHLOROETHENE AT CONCENTRATIONS ABOVE WISCONSIN GROUNDWATER ENFORCEMENT STANDARDS. WISCONSIN GROUNDWATER PREVENTIVE ACTION LIMITS ARE EXCEEDED FOR 1,1,1-TRICHLOROETHANE, TRICHLOROETHENE AND 1,1-DICHLOROETHENE. TRICHLOROETHENE WAS DETECTED ABOVE THE FEDERAL MCL OF 5 PPB.

## #SSR

### SUMMARY OF SITE RISKS

CERCLA REQUIRES THAT US EPA PROTECT HUMAN HEALTH AND ENVIRONMENT FROM CURRENT AND POTENTIAL EXPOSURE TO HAZARDOUS SUBSTANCES FOUND AT THE SITE. THE BASIS FOR THIS RESPONSE ACTION IS THE PRESENCE OF VOCs EXCEEDING WISCONSIN NR 140 GROUNDWATER STANDARDS, FEDERAL MCLs AND HEALTH-BASED RISK LEVELS IN GROUNDWATER WHICH SERVES AS THE SOLE SOURCE OF DRINKING WATER FOR THE AFFECTED AREA. THIS RESPONSE ACTION IS FURTHER SUPPORTED BY RECOMMENDATIONS FROM THE WISCONSIN DIVISION OF HEALTH THAT RESIDENTS WHOSE WELLS ARE CONTAMINATED ABOVE STATE STANDARDS SEEK AN ALTERNATE SUPPLY OF DRINKING WATER. THE REMEDIAL ACTION OBJECTIVE OF THIS OPERABLE UNIT IS THE IMPLEMENTATION OF A PERMANENT REPLACEMENT WATER SUPPLY FOR THE AFFECTED AREA THAT PROTECTS HUMAN HEALTH BY ELIMINATING EXPOSURE VIA INGESTION, DERMAL CONTACT AND INHALATION, TO CONTAMINATED GROUNDWATER.

THE BOTTLED WATER PROGRAM UNDERTAKEN BY NPI AS REQUIRED BY THE UNILATERAL ORDER ISSUED TO NPI BY USEPA IN APRIL 1989, ELIMINATED POTENTIAL EXPOSURE THROUGH INGESTION FOR THOSE WHO PARTICIPATE IN THIS VOLUNTARY PROGRAM. MOST BUSINESS AND RESIDENCES ARE USING BOTTLED WATER; HOWEVER SOME PRIVATE WELLS IN THE AFFECTED AREA ARE STILL USED FOR DRINKING. THE POTENTIAL EXPOSURE PATHWAYS OF DERMAL CONTACT WITH VOCs IN GROUNDWATER AND INHALATION OF VOCs DURING NORMAL HOUSEHOLD USE ARE NOT REDUCED BY USING BOTTLED WATER. USING BOTTLED WATER FOR COOKING, AND ESPECIALLY WASHING AND SHOWERING, IS NOT PRACTICAL FOR A HOMEOWNER AND POTENTIAL EXPOSURE TO VOCs FROM THESE PATHWAYS CONTINUES.

AS PART OF THE ONGOING RI/FS FOR THE SITE, USEPA WILL PREPARE A BASELINE RISK ASSESSMENT. THE BASELINE RISK ASSESSMENT IS BASED ON UNALTERED CONDITIONS AT THE SITE AS CONTEMPLATED BY THE NO ACTION ALTERNATIVE. THE BASELINE RISK ASSESSMENT DETERMINES ACTUAL OR POTENTIAL RISKS OR TOXIC EFFECTS THE CONTAMINANTS OF CONCERN AT THE SITE POSE UNDER CURRENT CONDITIONS. THE NO ACTION ALTERNATIVE FOR THIS OPERABLE UNIT ASSUMES THE BOTTLED WATER PROGRAM WOULD BE DISCONTINUED AND THE AFFECTED AREA WOULD RESUME USING PRIVATE WELLS FOR DRINKING WATER. AT THE TIME OF THIS RECORD OF DECISION (ROD), THE BASELINE RISK ASSESSMENT HAS NOT BEEN COMPLETED. THEREFORE, US EPA DETERMINED SITE-RELATED RISKS FOR THE GROUNDWATER INGESTION PATHWAY AS RELATED TO THIS OPERABLE UNIT REMEDIAL ACTION. THIS ASSESSMENT ESTIMATES EXPOSURE FROM CONTAMINANTS TO THE POPULATION, WHICH WAS THEN COMPARED TO CHEMICAL TOXICITY TO ARRIVE AT AN ESTIMATE OF HEALTH RISKS.

### CONTAMINANTS OF CONCERN

ANALYTICAL RESULTS OF SAMPLES COLLECTED DURING THE RI FROM PRIVATE WELLS AND MONITORING WELLS IN AND ADJACENT TO THE AFFECTED AREA ARE PRESENTED IN TABLES 1 AND 2, RESPECTIVELY. FIGURE 6 SHOWS THE LOCATIONS OF THESE WELLS. THE PRIMARY CONTAMINANTS DETECTED ARE VOCs, INCLUDING 1,1,1-TRICHLOROETHANE (TCA), TRICHLOROETHENE (TCE), 1,2-DICHLOROETHENE (1,2-DCE), 1,1-DICHLORO-ETHENE (1,1-DCE), TETRACHLOROETHENE (PCE), AND 1,1-DICHLOROETHANE (1,1-DCA). OF THESE VOCs, TCE, 1,1-DCE, PCE AND 1,1-DCA ARE CLASSIFIED AS PROBABLE HUMAN CARCINOGENS. BASED ON WHICH COMPOUNDS POSE THE GREATEST HEALTH RISKS, THE CONCENTRATIONS AND FREQUENCY OF DETECTION, THE PHYSICAL PROPERTIES RELATING TO MOBILITY AND PERSISTENCE, AND WHETHER AN ENVIRONMENTAL STANDARD OR CRITERIA (SUCH AS FEDERAL OR STATE DRINKING WATER STANDARD) EXISTS FOR A CONTAMINANT, THE FOLLOWING INDICATOR CHEMICALS WERE CONSIDERED TO BE REPRESENTATIVE OF GROUNDWATER CONTAMINATION IN THE AFFECTED AREA AND TO POSE THE GREATEST POTENTIAL HEALTH RISK.

- \* TETRACHLOROETHENE (PCE)
- \* TRICHLOROETHENE (TCE)
- \* 1,1-DICHLOROETHENE (1,1-DCE)
- \* 1,1-DICHLOROETHANE (1,1-DCA)
- \* 1,1,1-TRICHLOROETHANE (1,1,1-TCA)
- \* 1,2-DICHLOROETHENE (1,2-DCE)

THESE COMPOUNDS HAVE BEEN USED TO EVALUATE TOXICITY, EXPOSURE PATHWAYS AND POTENTIAL HEALTH RISKS FOR

INDIVIDUALS IN THE AFFECTED AREA.

#### EXPOSURE ASSESSMENT

THE CONTAMINATED SAND AND GRAVEL AQUIFER IS THE CURRENT SOURCE OF DRINKING WATER FOR THE AFFECTED AREA. THE AQUIFER OF CONCERN IS A CLASS I AQUIFER (SOLE-SOURCE AQUIFER WITHOUT A VIABLE ALTERNATIVE SOURCE OF SUPPLY). NPI IS PROVIDING BOTTLED WATER TO THE AFFECTED AREA UNDER THE TERMS OF A UNILATERAL ORDER; HOWEVER, BECAUSE OF THE VOLUNTARY NATURE OF THE PROGRAM, SOME RESIDENCES ARE NOT PARTICIPATING AND CONTINUE TO USE THEIR PRIVATE WELLS FOR DRINKING WATER.

POTENTIAL HEALTH RISKS WERE EVALUATED FOR THE GROUNDWATER INGESTION PATHWAY FOR EACH INDIVIDUAL PRIVATE WELL AND MONITORING WELL IN THE AFFECTED AREA EXHIBITING CONTAMINATION AND WITHIN THE GROUNDWATER FLOW PATH FROM THE SOURCE AREA THROUGH THE AFFECTED AREA. THIS RESULTS IN A RANGE OF ESTIMATED RISKS FOR CONTAMINATED PRIVATE AND MONITORING WELLS WITHIN THE AFFECTED AREA.

THE CONTAMINANT INTAKE, AND THUS THE RISK THAT AN INDIVIDUAL WOULD LIKELY INCUR FROM EXPOSURE TO AN INDICATOR CHEMICAL WAS ESTIMATED FROM THE EXPOSURE PATHWAY BY INCORPORATING STANDARD EXPOSURE ASSUMPTIONS OF A 70-KG HUMAN AND INGESTION OF TWO LITERS OF WATER PER DAY OVER A LIFETIME OF 70 YEARS.

#### TOXICITY ASSESSMENT

USING DATA GENERATED DURING THE RI, US EPA CONDUCTED A SITE-SPECIFIC BASELINE RISK ASSESSMENT TO CHARACTERIZE THE CURRENT THREAT TO HUMAN HEALTH FROM INGESTION OF CONTAMINATED GROUNDWATER. THE RESULTS OF THE RISK ASSESSMENT ESTABLISH ACCEPTABLE LEVELS FOR THE CONTAMINANTS OF CONCERN IN GROUNDWATER.

TOXIC SUBSTANCES MAY POSE CERTAIN TYPES OF HAZARDS TO HUMAN AND ANIMAL POPULATIONS. TYPICALLY, HAZARDS TO HUMAN HEALTH ARE EXPRESSED AS CARCINOGENIC AND NON-CARCINOGENIC TOXIC EFFECTS. CARCINOGENIC RISK, NUMERICALLY PRESENTED AS AN EXPONENTIAL FACTOR (E.G.,  $1 \times (10^{-6})$ ), IS THE INCREASED CHANCE A PERSON MAY HAVE IN CONTRACTING CANCER IN HIS OR HER LIFETIME. FOR EXAMPLE, A  $1 \times (10^{-6})$  RISK DUE TO A LIFETIME OF DRINKING WATER THAT CONTAINS THE CONTAMINANTS OF CONCERN MEANS THAT A PERSON'S CHANCE OF CONTRACTING CANCER IS INCREASED BY 1 IN 1 MILLION. THE US EPA ATTEMPTS TO REDUCE RISKS AT SUPERFUND SITES TO A RANGE OF  $1 \times (10^{-4})$  TO  $1 \times (10^{-6})$  (1 IN 10,000 TO 1 IN 1 MILLION), WITH EMPHASIS ON THE LOWER END ( $1 \times (10^{-6})$ ) OF THE SCALE. FOR THIS OPERABLE UNIT, A RISK OF  $1 \times (10^{-6})$  IS DETERMINED TO BE PROTECTIVE OF HUMAN HEALTH AND THEREFORE APPROPRIATE CONSIDERING THAT CONTAMINATED GROUNDWATER IS CURRENTLY USED FOR DRINKING WATER AND IS THE SOLE SOURCE OF DRINKING WATER FOR THE AFFECTED AREA. IN ADDITION, THE RISK LEVEL ESTABLISHED BY THE STATE OF WISCONSIN FOR CONTAMINANTS FOR WHICH THERE IS NO FEDERAL MCL IS  $1 \times (10^{-6})$  OR 1 IN 1 MILLION.

THE HAZARD INDEX IS AN EXPRESSION OF NON-CARCINOGENIC TOXIC EFFECTS AND MEASURES WHETHER A PERSON IS BEING EXPOSED TO ADVERSE LEVELS OF NON-CARCINOGENS. ANY HAZARD INDEX VALUE GREATER THAN 1.0 SUGGESTS THAT A NON-CARCINOGEN PRESENTS A POTENTIALLY UNACCEPTABLE TOXIC EFFECT.

BASED ON TOXICOLOGICAL STUDIES, TCE AND PCE ARE CLASSIFIED AS GROUP B2 - PROBABLE HUMAN CARCINOGENS. THERE IS SUFFICIENT EVIDENCE OF CARCINOGENICITY IN ANIMALS BUT INADEQUATE EVIDENCE OF CARCINOGENICITY IN HUMANS. 1,1-DCE AND 1,1-DCA ARE CLASSIFIED AS GROUP C - PROBABLE HUMAN CARCINOGENS. THERE IS LIMITED EVIDENCE OF CARCINOGENICITY IN ANIMALS. THE CARCINOGENIC POTENCY FACTORS FOR TCE, PCE, 1,1-DCE AND 1,1-DCA ARE  $1.1 \times (10^{-2})$ ,  $5.1 \times (10^{-2})$ ,  $6 \times (10^{-2})$  AND  $9.1 \times (10^{-2})$ , RESPECTIVELY. NOT ENOUGH DATA IS AVAILABLE TO GENERATE CARCINOGENIC POTENCY FACTORS FOR 1,1,1-TCA AND 1,2-DCE AND THESE COMPOUNDS WERE EXCLUDED FROM THE RISK CALCULATIONS. HOWEVER, IT IS NOTED THAT BY ENTIRELY EXCLUDING 1,1,1-TCA AND 1,2-DCE, THE RISKS CALCULATED ARE LIKELY UNDERESTIMATED.

#### SUMMARY OF RISK CHARACTERIZATION

IDEALLY EACH PRIVATE WELL SHOULD BE MODELED OVER THE EXPECTED EXPOSURE DURATION TO OBTAIN THE ARITHMETIC MEAN AND UPPER BOUND CONCENTRATION VALUE FOR EACH CONTAMINANT OF CONCERN. A CALCULATION OF RISK AT EACH WELL CAN THEN BE DETERMINED UNDER THE ASSUMPTION THAT THE REASONABLY MAXIMALLY EXPOSED INDIVIDUAL IS DRINKING WATER ONLY FROM THAT WELL. HOWEVER, WITH THE LIMITED SAMPLING DATA, NO TEMPORAL AVERAGES AND UPPER BOUND CONCENTRATION VALUES COULD BE CALCULATED. THEREFORE, THE ONE-TIME SAMPLES ARE ASSUMED TO BE REPRESENTATIVE

OF THE TEMPORAL AVERAGE FOR EACH WELL AND THE RISKS CALCULATED ARE ASSUMED TO BE FOR AN AVERAGE EXPOSED INDIVIDUAL, AND NOT FOR A MAXIMALLY EXPOSED INDIVIDUAL AS CALLED FOR IN THE RISK ASSESSMENT GUIDANCE FOR SUPERFUND (12/89). THIS RESULTS IN AN UNDERESTIMATION OF THE CALCULATED RISKS.

UNDER CURRENT GROUNDWATER USE CONDITIONS, A POTENTIAL CARCINOGENIC RISK RANGE OF  $9 \times (10^{-7})$  (9 IN 10 MILLION) TO  $7 \times (10^{-5})$  (7 IN 100,000) WAS CALCULATED FOR THE GROUNDWATER INGESTION PATHWAY FOR THE COMBINED EFFECTS OF THE CONTAMINANTS OF CONCERN, EXCLUDING 1,1,1-TCA AND 1,2-DCE. THE POTENTIAL CARCINOGENIC RISKS FOR MONITORING WELLS WITHIN THE AFFECTED AREA RANGED FROM  $2 \times (10^{-6})$  (2 IN 1 MILLION) TO  $2 \times (10^{-4})$  (2 IN 10,000).

HAZARD INDICES DID NOT EXCEED 1.0 IN ANY PRIVATE OR MONITORING WELLS FOR WHICH A VALUE WAS DETERMINED. THE HIGHEST HAZARD INDEX ESTIMATED FOR ANY WELL WAS 0.2, WELL BELOW THE ACCEPTABLE LIMIT OF 1.0.

THE POTENTIAL CANCER RISKS FROM DIRECT CONTACT WITH VOCs IN GROUNDWATER AND INHALATION OF VOCs DURING NORMAL HOUSEHOLD USE WERE NOT DETERMINED BY US EPA FOR THIS OPERABLE UNIT REMEDIAL ACTION. THE BASELINE RISK ASSESSMENT CONDUCTED BY US EPA'S CONTRACTOR WILL EVALUATE THE POTENTIAL HEALTH RISKS FOR THESE EXPOSURE PATHWAYS. THE ADDITIONAL RISKS FROM THESE PATHWAYS WOULD INCREASE THE CUMULATIVE RISKS ASSOCIATED WITH CONSUMPTION OF AND EXPOSURE TO CONTAMINATED GROUNDWATER. ADDITIONAL CONCERNS ARE UNCERTAINTIES OF PAST CONTAMINANT LEVELS IN PRIVATE WELLS AND POTENTIAL INCREASED RISKS DUE TO LONG-TERM EXPOSURE. THE EAST DISPOSAL AREA DATES TO THE 1950S AND THE MELBY ROAD SITE OPERATED BETWEEN 1966 AND 1969.

#### #DA

#### DESCRIPTION OF ALTERNATIVES

BASED ON THE REQUIREMENTS OF THE UNILATERAL ORDER, NPI CONDUCTED A PFS THAT IDENTIFIED AND EVALUATED IN DETAIL, A NUMBER OF REMEDIAL ALTERNATIVES FOR A PERMANENT AND SAFE ALTERNATE DRINKING WATER SUPPLY FOR THE AFFECTED AREA.

NPI INITIALLY DEVELOPED A LIST OF NINE ALTERNATIVES FOR THE PERMANENT REPLACEMENT OF DRINKING WATER SUPPLIES IN THE AFFECTED AREA. THROUGH A PRE-SCREENING PROCESS IN WHICH EACH OF THE NINE ALTERNATIVES WERE EVALUATED WITH RESPECT TO EFFECTIVENESS, IMPLEMENTABILITY AND COST, FOUR ALTERNATIVES WERE ELIMINATED FROM FURTHER CONSIDERATION AND FIVE ALTERNATIVES WERE RETAINED FOR THE DETAILED ANALYSIS BASED ON THEIR APPLICABILITY TO SITE CONDITIONS. A SIXTH ALTERNATIVE, SALE OF WATER FROM THE CITY OF EAU CLAIRE TO HALLIE SANITARY DISTRICT NO. 1 (DISTRICT), WAS ONE OF THE ALTERNATIVES DROPPED FROM FURTHER CONSIDERATION EVEN THOUGH IT IS COST EFFECTIVE AND EASILY CONSTRUCTED. THE CITY OF EAU CLAIRE HAS STEADFASTLY REFUSED TO SELL WATER TO NONRESIDENTS, INCLUDING RESIDENTS IN THE AFFECTED AREA WHOSE DRINKING WATER IS PRESENTLY CONTAMINATED. EAU CLAIRE HAS A MUNICIPAL ORDINANCE PROHIBITING CONNECTION TO MUNICIPAL SERVICES UNLESS THE PROPERTY ANNEXES TO THE CITY. THIS PREREQUISITE OF ANNEXATION PRECLUDED IMPLEMENTATION OF THIS ALTERNATIVE AND ELIMINATED IT FROM FURTHER CONSIDERATION. HOWEVER, DURING THE PUBLIC COMMENT PERIOD, THE CITY OF EAU CLAIRE GRANTED AN EXCEPTION TO ITS MUNICIPAL ORDINANCE AND PROPOSED TO RETAIL WATER TO INDIVIDUAL CUSTOMERS WITHIN THE AFFECTED AREA WITHOUT REQUIRING ANNEXATION. THE CITY'S PROPOSAL WAS SUBSEQUENTLY FORMALIZED IN A RESOLUTION ADOPTED BY THE EAU CLAIRE CITY COUNCIL ON FEBRUARY 13, 1990, AND IS IDENTIFIED AS ALTERNATIVE 6.

ALTERNATIVES 1 THROUGH 6 ARE SUMMARIZED BELOW. ALTERNATIVES 1 THROUGH 5 ARE DISCUSSED IN DETAIL IN THE PFS. DETAILED INFORMATION ON ALTERNATIVE 6 IS PRESENTED IN EAU CLAIRE'S MARCH 1, 1990 SUBMITTAL DURING THE PUBLIC COMMENT PERIOD, WHICH IS PART OF THE ADMINISTRATIVE RECORD FOR THE SITE.

#### ALTERNATIVE 1 - NO ACTION

UNDER THIS ALTERNATIVE, NO FURTHER ACTION WOULD TAKE PLACE AT THE SITE. INDIVIDUAL PRIVATE WELLS WOULD CONTINUE AS THE SOURCE OF DRINKING WATER FOR THE AFFECTED AREA. SELECTED WELLS WOULD BE SAMPLED SEMIANNUALLY FOR VOC ANALYSIS. US EPA POLICY REQUIRES CONSIDERATION OF THE NO ACTION ALTERNATIVE TO SERVE AS A BASIS FOR COMPARING THE OTHER ALTERNATIVES. THE MONITORING COSTS ASSOCIATED WITH THIS ALTERNATIVE ARE ESTIMATED AT \$23,500 PER YEAR.

#### ALTERNATIVE 2 - HALLIE SANITARY DISTRICT WITH EAU CLAIRE SUPPLY FOR THE AREAS ANNEXED BY THE CITY OF EAU CLAIRE

UNDER THIS ALTERNATIVE, A PERMANENT WATER SUPPLY FOR THE AFFECTED AREA WOULD BE PROVIDED BY TWO INDEPENDENT WATER DISTRIBUTION SYSTEMS. THE DISTRICT WOULD CONSTRUCT A SUPPLY WELL, DISTRIBUTION SYSTEM AND STORAGE FACILITIES TO PROVIDE DRINKING WATER TO THE BUSINESSES AND RESIDENCES WITHIN THE AFFECTED AREA THAT ARE PART OF THE DISTRICT. THE CITY OF EAU CLAIRE WOULD EXTEND MUNICIPAL WATER SERVICE TO THOSE RESIDENCES AND BUSINESSES WITHIN THE AFFECTED AREA THAT HAVE SUCCESSFULLY ANNEXED TO THE CITY. THE CONNECTION TO EAU CLAIRE WOULD BE MADE AT MELBY ROAD, IMMEDIATELY EAST OF US HIGHWAY 53, WHERE THE CITY HAS AN EXISTING 12-INCH DIAMETER WATER MAIN.

ALL SYSTEM COMPONENTS WOULD MEET AMERICAN WATER WORKS ASSOCIATION (AWWA) SPECIFICATIONS. DESIGN SPECIFICATIONS FOR THE RESPECTIVE SYSTEMS WILL REQUIRE APPROVAL BY WDNR BUREAU OF WATER SUPPLY TO INSURE COMPLIANCE WITH APPLICABLE STATE CODES. EACH SYSTEM WILL ALSO COMPLY WITH THE RESPECTIVE CODES OF THE DISTRICT AND CITY OF EAU CLAIRE, INCLUDING MINIMUM DESIGN REQUIREMENTS FOR FIRE PROTECTION.

ALL EXISTING WELLS WOULD BE CLOSED AND ABANDONED IN ACCORDANCE WITH WDNR WELL ABANDONMENT REQUIREMENTS. INDIVIDUAL WELL OWNERS COULD SEEK A VARIANCE TO WELL ABANDONMENT BY DEMONSTRATING A NEED FOR CONTINUED USE OF THE WELL FOR NON-HUMAN CONSUMPTION, SUBJECT TO ANY RESTRICTIONS BY THE LOCAL GOVERNING BODY. THE WELL WOULD ALSO BE INSPECTED BY WDNR TO ENSURE THAT THE WELL COMPLIES WITH STATE CONSTRUCTION CODES. SEVERAL COST ESTIMATES WERE PREPARED FOR COMPARISON PURPOSES. NPI'S COST ESTIMATES IN THE PFS WERE PREPARED BY A LOCAL ENGINEERING FIRM FAMILIAR WITH STATE AND LOCAL REQUIREMENTS FOR A MUNICIPAL WATER SYSTEM. NPI ESTIMATED CONSTRUCTION COSTS AT JUST OVER \$2 MILLION AND \$521,780 FOR THE DISTRICT AND EAU CLAIRE, RESPECTIVELY. THESE ESTIMATES WERE BASED ON THE ASSUMPTION THAT EAU CLAIRE WOULD SERVICE THOSE PORTIONS OF THE AFFECTED AREA THAT HAD ANNEXED TO EAU CLAIRE AT THE TIME THE PFS WAS PREPARED AND INDEPENDENT OF FEDERAL INVOLVEMENT. WELL CLOSURE AND ABANDONMENT ADDS APPROXIMATELY \$107,000 TO THE REMEDIAL ACTION COSTS FOR A TOTAL PROJECTED COST OF \$2.6 MILLION.

AN ENGINEERING FIRM CONTRACTED BY THE DISTRICT, ESTIMATED CONSTRUCTION COSTS OF APPROXIMATELY \$2.1 MILLION FOR A DISTRIBUTION SYSTEM THAT WOULD SERVICE THE ENTIRE AFFECTED AREA. AN ADDITIONAL \$226,000 WAS PROVIDED FOR DESIGN-RELATED ACTIVITIES. WITH WELL ABANDONMENT AND CLOSURE COSTS OF APPROXIMATELY \$107,000, THE ESTIMATED TOTAL REMEDIAL ACTION COSTS ARE \$2.4 MILLION.

YEARLY OPERATION AND MAINTENANCE COST ESTIMATES VARY CONSIDERABLY AND RANGE FROM THE DISTRICT'S ESTIMATE OF \$48,200 TO NPI'S ESTIMATE OF \$120,000. THE WISCONSIN PUBLIC SERVICE COMMISSION (PSC) ESTABLISHED A YEARLY REVENUE REQUIREMENT OF APPROXIMATELY \$80,000 FOR THE DISTRICT WHICH PROBABLY REPRESENTS THE MOST ACCURATE OPERATION AND MAINTENANCE COST ESTIMATE. APPROXIMATELY \$10,000 ARE ADDED TO THE OPERATION AND MAINTENANCE COSTS FOR MONITORING PRIVATE WELLS IMMEDIATELY OUTSIDE THE AFFECTED AREA THAT ARE STILL USED FOR DRINKING WATER.

FINAL REMEDIAL ACTION COSTS WILL BE DETERMINED BY THE SIZE OF THE RESPECTIVE DISTRICT AND EAU CLAIRE SERVICE AREAS AND THE EXTENT OF DUPLICATION OF CONSTRUCTION REQUIRED TO IMPLEMENT THIS ALTERNATIVE. FOR COMPARISON PURPOSES, THE MINIMUM REMEDIAL ACTION COST ESTIMATE PRESENTED BELOW ASSUMES 100 PERCENT OF THE SERVICES WILL BE PROVIDED BY THE DISTRICT AND THE MAXIMUM ESTIMATE IS BASED ON THE ASSUMPTIONS AND CONDITIONS PRESENTED IN THE PROPOSED PLAN. INCREASING THE SIZE OF EAU CLAIRE'S SERVICE AREA THROUGH ANNEXATIONS WITHIN THE AFFECTED AREA WILL INCREASE THE TOTAL REMEDIAL ACTION COSTS.

ESTIMATED REMEDIAL ACTION COSTS	\$2.4-2.6 MILLION
ESTIMATED ANNUAL O&M COSTS	\$90,000
ESTIMATED TIME TO COMPLETION OF REMEDIAL ACTION (MINIMUM)	15 MONTHS
ESTIMATED 10 YEAR PRESENT WORTH	\$3.0-3.2 MILLION

ALTERNATIVE 3 - ANNEXATION OF THE AFFECTED AREA BY THE CITY OF EAU CLAIRE FOLLOWED BY EXTENSION OF MUNICIPAL WATER TO THE AFFECTED AREA

UNDER THIS ALTERNATIVE, THE ENTIRE AFFECTED AREA WOULD ANNEX TO THE CITY OF EAU CLAIRE. EAU CLAIRE WOULD THEN EXTEND ITS MUNICIPAL SYSTEM TO SERVICE THE AFFECTED AREA. IT IS ASSUMED THAT THE POINT OF CONNECTION WOULD BE AT MELBY ROAD AS DISCUSSED UNDER ALTERNATIVE 2. CONSTRUCTION OF THE DISTRIBUTION SYSTEM WOULD COMPLY WITH MUNICIPAL CODES AND AWWA SPECIFICATIONS. THE WDNR BUREAU OF WATER SUPPLY MUST APPROVE THE DESIGN

TO ENSURE THE PROPOSED SYSTEM MEETS THE MINIMUM DESIGN CRITERIA ESTABLISHED BY STATE CODE, INCLUDING FIRE PROTECTION. AS WITH ALTERNATIVE 3, ALL EXISTING WELLS WOULD BE CLOSED AND ABANDONED IN ACCORDANCE WITH WDNR WELL ABANDONMENT REQUIREMENTS.

ESTIMATED CONSTRUCTION COSTS AND ANNUAL OPERATION AND MAINTENANCE COSTS WERE PREPARED BY NPI. THE ESTIMATED COST OF IMPLEMENTING THIS ALTERNATIVE IS \$1.6 MILLION. THE OPERATION AND MAINTENANCE COSTS WERE ESTIMATED USING THE 1989 OPERATION AND MAINTENANCE COSTS FOR THE EAU CLAIRE WATER UTILITY. THE COSTS WERE CALCULATED BASED ON THE AVERAGE PER USER COST AND PROJECTED TO THE NUMBER OF SERVICES IN THE AFFECTED AREA. THE ESTIMATED OPERATION AND MAINTENANCE COSTS FOR ALTERNATIVE 3 ARE \$41,000, WHICH INCLUDES \$10,000 FOR MONITORING PRIVATE WELLS IMMEDIATELY OUTSIDE THE AFFECTED AREA.

ESTIMATED REMEDIAL ACTION COSTS	\$1.7 MILLION
ESTIMATED ANNUAL O&M COSTS	\$41,000
ESTIMATED TIME TO COMPLETION OF REMEDIAL ACTION (MINIMUM)	15 MONTHS
ESTIMATED 10 YEAR PRESENT WORTH	\$2.0 MILLION

#### ALTERNATIVE 4 - INDIVIDUAL HOUSE AND COMMERCIAL ESTABLISHMENT WATER TREATMENT SYSTEMS

UNDER THIS ALTERNATIVE, INDIVIDUAL GRANULAR ACTIVATED CARBON (GAC) UNITS WOULD BE INSTALLED ON EACH RESIDENTIAL AND COMMERCIAL WATER SUPPLY WELL TO REMOVE VOCs PRIOR TO USE WITHIN THE HOME OR BUSINESS. THE ACTIVATED CARBON, THROUGH PROPER MAINTENANCE, WOULD EFFICIENTLY REMOVE VOCs THROUGH ADSORPTION.

THE SYSTEM WOULD CONSIST OF TWO CARBON FILTERS CONNECTED IN SERIES WITH PIPING, VALVES, SAMPLING TAPS AND PRESSURE GAUGES. THE PRIMARY FILTER IS DESIGNED TO REMOVE THE MAJORITY OF VOCs AND THE SECONDARY FILTER PROVIDES POLISHING. A FILTER AFTER THE POLISHING REMOVES CARBON FINES.

A GAC TREATMENT UNIT WOULD BE INSTALLED ON THE EXISTING WATER SUPPLY LINE DOWNSTREAM OF THE WELL WATER PRESSURIZATION TANK AND PRIOR TO ENTRY INTO THE HOUSEHOLD PLUMBING SYSTEM. THE TREATMENT SYSTEM WILL BE A WHOLE HOUSE TREATMENT SYSTEM.

THE SELECTED GAC TREATMENT UNIT REQUIRES APPROVAL FROM THE WISCONSIN DEPARTMENT OF INDUSTRY, LABOR AND HUMAN RELATIONS (DILHR) TO ENSURE THAT THE TREATMENT DEVICE IS ACCEPTABLE FOR THE INTENDED USE. ADDITIONALLY, WDNR'S BUREAU OF WATER SUPPLY-PRIVATE WATER SUPPLY SECTION MUST APPROVE THE DILHR-APPROVED UNIT FOR EACH HOME AND BUSINESS.

THE ESTIMATED COST OF PROVIDING INDIVIDUAL CARBON TREATMENT SYSTEMS TO RESIDENCES AND BUSINESSES IN THE AFFECTED AREA IS \$417,300. ANNUAL OPERATION AND MAINTENANCE COSTS ARE ESTIMATED AT \$248,000, INCLUDING THE COSTS OF MONITORING.

ESTIMATED REMEDIAL ACTION COSTS	\$417,000
ESTIMATED ANNUAL O&M COSTS	\$248,000
ESTIMATED TIME TO COMPLETION OF REMEDIAL ACTION (MINIMUM)	9-12 MONTHS
ESTIMATED 10 YEAR PRESENT WORTH	\$1.9 MILLION

#### ALTERNATIVE 5 - REPLACEMENT OF PRIVATE WELLS

UNDER THIS ALTERNATIVE, EXISTING SHALLOW WELLS IN THE AFFECTED AREA WOULD BE CLOSED AND ABANDONED PURSUANT TO WDNR REQUIREMENTS, AND NEW WELLS WOULD BE INSTALLED IN THE UNDERLYING GRANITE BEDROCK AQUIFER. NEW INDIVIDUAL WELLS WOULD BE DRILLED IN THE BEDROCK TO DEPTHS OF APPROXIMATELY 300 FEET AND DEVELOPED BY "HYDROFRACKING" IN ORDER TO IMPROVE YIELD. THE WELLS WOULD BE DRILLED ADJACENT TO EXISTING WELLS WHERE PRACTICAL AND CASED INTO THE BEDROCK.

WELLS WOULD BE TEST PUMPED TO ENSURE THEY COULD DELIVER FLOW EQUAL TO THE EXISTING WELL FLOW. IF NECESSARY, "HYDROFRACKING" WOULD CONTINUE UNTIL THE NEW WELL PRODUCED THE REQUIRED FLOW RATE. THE NEW WELL WOULD BE EQUIPPED WITH A SUBMERSIBLE PUMP AND IF NECESSARY, MODIFICATIONS TO INDIVIDUAL HOME PLUMBING SYSTEMS WOULD BE

MADE TO ACCOMMODATE THE NEW WELL.

THE COSTS ASSOCIATED WITH INDIVIDUAL WELL REPLACEMENTS ARE ESTIMATED AT \$2.4 MILLION. ANNUAL OPERATION AND MAINTENANCE COSTS ARE ESTIMATED AT \$321,000 BECAUSE OF THE FREQUENT VOC MONITORING WHICH WOULD BE REQUIRED TO ENSURE THAT CONTAMINATION IS NOT MIGRATING TO THE DEEPER WELLS.

ESTIMATED REMEDIAL ACTION COSTS	\$2.4 MILLION
ESTIMATED ANNUAL O&M COSTS	\$321,000
ESTIMATED TIME TO COMPLETION OF REMEDIAL ACTION (MINIMUM)	2 YEARS
ESTIMATED 10 YEAR PRESENT WORTH	\$4.4 MILLION

ALTERNATIVE 6 - EAU CLAIRE WATER SUPPLY TO THE AFFECTED AREA WITHOUT REQUIRING ANNEXATION BY RESIDENCES AND BUSINESSES

WITH THE EXCEPTION OF THE ELIMINATION OF ANNEXATION BY THE ENTIRE AFFECTED AREA AS A PREREQUISITE TO WATER SERVICE, THIS ALTERNATIVE IS IDENTICAL TO ALTERNATIVE 3. BUSINESSES AND RESIDENCES THAT CHOOSE TO REMAIN IN THE TOWN OF HALLIE WOULD NOT HAVE TO ANNEX AND WOULD RECEIVE MUNICIPAL WATER FROM EAU CLAIRE ON THE SAME SCHEDULE AS THOSE WHO PREVIOUSLY ANNEXED. ANNEXATION BY BUSINESSES AND RESIDENCES WITHIN THE AFFECTED AREA WOULD CONTINUE TO BE ON A VOLUNTARY BASIS AND NOT IMPACT THEIR ABILITY TO RECEIVE WATER FROM EAU CLAIRE. ALL ANNEXATIONS ARE SUBJECT TO MUNICIPAL AND STATE LAW GOVERNING ANNEXATION.

AS WITH ALTERNATIVE 3, THE WATER SYSTEM WOULD COMPLY WITH MUNICIPAL CODES AND AWWA SPECIFICATIONS. ALL EXISTING PRIVATE WELLS IN THE AFFECTED AREA WOULD BE CLOSED AND ABANDONED IN ACCORDANCE WITH WDNR WELL ABANDONMENT REQUIREMENTS. THE ESTIMATED COST OF IMPLEMENTING THIS ALTERNATIVE, INCLUDING PROVISIONS FOR FIRE PROTECTION, IS \$1.6 MILLION. ANNUAL OPERATION AND MAINTENANCE COSTS ARE ESTIMATED AT \$41,000. AS IN ALTERNATIVES 2 AND 3, APPROXIMATELY \$10,000 OF THE OPERATION AND MAINTENANCE COSTS ARE FOR MONITORING PRIVATE WELLS OUTSIDE THE AFFECTED AREA THAT STILL SERVE AS A DRINKING WATER SUPPLY.

ESTIMATED REMEDIAL ACTION COSTS	\$1.7 MILLION
ESTIMATED ANNUAL O&M COSTS	\$41,000
ESTIMATED TIME TO COMPLETION OF REMEDIAL ACTION (MINIMUM)	9-12 MONTHS
ESTIMATED 10 YEAR PRESENT WORTH	\$2.0 MILLION

## #SCAA

### SUMMARY OF COMPARATIVE ANALYSIS OF ALTERNATIVES

ALTERNATIVES WERE EVALUATED AGAINST EACH OTHER TO DETERMINE THE MOST APPROPRIATE ALTERNATIVE FOR A PERMANENT AND SAFE ALTERNATE DRINKING WATER SUPPLY FOR THE AFFECTED AREA THAT IS PROTECTIVE OF HUMAN HEALTH, ATTAINS APPLICABLE OR RELEVANT AND APPROPRIATE REQUIREMENTS (ARARS), IS COST EFFECTIVE AND REPRESENTS THE BEST BALANCE AMONG THE EVALUATING CRITERIA. COMPARISONS ARE BASED ON THE NINE CRITERIA, AS DETERMINED TO BE APPLICABLE TO THIS OPERABLE UNIT, OUTLINED IN THE NATIONAL CONTINGENCY PLAN (SECTION 300.430(E)(9)(III) AND SECTION 121 OF CERCLA, AS AMENDED (CLEAN-UP STANDARDS).

#### THRESHOLD CRITERIA

##### OVERALL PROTECTION OF HUMAN HEALTH AND THE ENVIRONMENT

OVERALL PROTECTION OF HUMAN HEALTH AND THE ENVIRONMENT ADDRESSES WHETHER A REMEDY ELIMINATES, REDUCES, OR CONTROLS THREATS TO HUMAN HEALTH AND THE ENVIRONMENT.

ALL REPLACEMENT WATER SUPPLY ALTERNATIVES, WITH THE EXCEPTION OF THE NO ACTION ALTERNATIVE, ACHIEVE OVERALL PROTECTION OF HUMAN HEALTH BY ELIMINATING EXPOSURE TO AND CONSUMPTION OF CONTAMINATED GROUNDWATER; HOWEVER, THERE ARE DIFFERENCES IN THE MEASURES REQUIRED TO MAINTAIN AND GUARANTEE CONTINUED PROTECTION. ALTERNATIVES 2, 3 AND 6 ARE EQUALLY THE MOST RELIABLE BECAUSE THEY OFFER A PROVEN AND DEPENDABLE METHOD FOR PROVIDING DRINKING WATER TO THE AFFECTED AREA. CENTRAL DISTRIBUTION SYSTEMS HAVE BUILT-IN SAMPLING AND TREATMENT



SAFEGUARDS TO ENSURE THAT DRINKING WATER QUALITY CONTINUES TO MEET APPLICABLE FEDERAL AND STATE STANDARDS.

THERE ARE UNCERTAINTIES ASSOCIATED WITH ALTERNATIVES 4 AND 5 WHICH RESULT IN HIGHER OPERATION AND MAINTENANCE COSTS FOR THESE ALTERNATIVES. ALTERNATIVE 4 REQUIRES A MONITORING AND MAINTENANCE PROGRAM BY QUALIFIED PERSONNEL TO ENSURE PROPER OPERATION OF THE TREATMENT UNITS. FILTERS HAVE TO BE REPLACED PERIODICALLY AND SAMPLING ON A REGULAR SCHEDULE IS REQUIRED TO VERIFY EFFECTIVE REMOVAL OF CONTAMINANTS. UNDER ALTERNATIVE 5, BEDROCK REPLACEMENT WELLS WOULD PRESUMABLY DRAW FROM A DEEPER AND UNCONTAMINATED AQUIFER; HOWEVER, A SAMPLING AND ANALYSIS PROGRAM WILL BE REQUIRED TO MONITOR THE QUALITY OF THE BEDROCK AQUIFER. WELL REPLACEMENT TECHNIQUES COULD POTENTIALLY CREATE PATHWAYS FOR CONTAMINANT MOVEMENT FROM THE SAND AND GRAVEL AQUIFER TO THE BEDROCK AQUIFER.

THE NO ACTION ALTERNATIVE DOES NOT PROVIDE FOR THE PROTECTION OF PUBLIC HEALTH BECAUSE THE CONSUMPTION OF CONTAMINATED GROUNDWATER WOULD CONTINUE. FURTHERMORE, UNTIL ON-SITE SOURCE AREAS ARE REMEDIATED, THE RELEASE OF CONTAMINANTS TO THE ENVIRONMENT WILL ALSO CONTINUE.

DUE TO THE LIMITED SCOPE OF THIS OPERABLE UNIT, IT ONLY PROVIDES FOR THE PROTECTION OF PUBLIC HEALTH. PROTECTION OF THE ENVIRONMENT WILL BE ACHIEVED BY FUTURE OPERABLE UNIT(S) THAT ADDRESS TREATMENT OF CONTAMINATED GROUNDWATER AND REMEDIATION OF ON-SITE SOURCE AREAS.

COMPLIANCE WITH APPLICABLE OR RELEVANT AND APPROPRIATE REQUIREMENTS (ARARS)

THIS CRITERION EVALUATES WHETHER AN ALTERNATIVE MEETS APPLICABLE OR RELEVANT AND APPROPRIATE REQUIREMENTS SET FORTH IN FEDERAL OR MORE STRINGENT STATE LAWS OR ENVIRONMENTAL STANDARDS PERTAINING TO THE REMEDIAL ACTION.

ALTERNATIVES 2, 3, 4, 5 AND 6 WILL MEET ALL FEDERAL AND STATE ARARS AND OTHER REQUIREMENTS AND REGULATIONS WHICH ARE SUMMARIZED IN TABLE 3 FOR THE RESPECTIVE ALTERNATIVES. UNDER ALTERNATIVE 1 (NO ACTION), CONSUMPTION OF GROUNDWATER CONTAINING VOCs AT CONCENTRATIONS ABOVE FEDERAL MCLs, WISCONSIN NR 140 GROUNDWATER STANDARDS AND HEALTH-BASED RISK LEVELS WOULD CONTINUE.

PRIMARY BALANCING CRITERIA

LONG-TERM EFFECTIVENESS AND PERMANENCE

THIS CRITERION EVALUATES THE ABILITY OF AN ALTERNATIVE TO MAINTAIN PROTECTION OF HUMAN HEALTH AND THE ENVIRONMENT ALONG WITH THE DEGREE OF CERTAINTY THAT THE ALTERNATIVE WILL PROVE SUCCESSFUL.

AS CENTRAL DISTRIBUTION SYSTEMS, ALTERNATIVES 2, 3 AND 6 ARE RELIABLE AND PROVEN METHODS OF PROVIDING A PERMANENT DRINKING WATER SUPPLY. MONITORING SAFEGUARDS ENSURE THAT THE DRINKING WATER QUALITY CONTINUES TO MEET FEDERAL AND STATE STANDARDS.

ALTERNATIVE 4, INDIVIDUAL GAC TREATMENT UNITS, IS ALSO A PROVEN AND RELIABLE METHOD FOR PROVIDING A SAFE DRINKING WATER SUPPLY; HOWEVER, DUE TO THE NUMBER OF TREATMENT UNITS REQUIRED TO SERVICE THE AFFECTED AREA AND THE AVAILABILITY OF A CENTRAL DISTRIBUTION SYSTEM, THIS ALTERNATIVE DOES NOT MEET THE REMEDIAL ACTION OBJECTIVE OF PROVIDING A PERMANENT DRINKING WATER SUPPLY. LONG-TERM EFFECTIVENESS IS ALSO CONTINGENT UPON UNRESTRICTED FULL ACCESS TO EACH TREATMENT UNIT FOR REQUIRED MAINTENANCE AND MONITORING BY QUALIFIED PERSONNEL.

THERE ARE SEVERAL UNCERTAINTIES ASSOCIATED WITH ALTERNATIVE 5, INDIVIDUAL WELL REPLACEMENT. IT IS NOT KNOWN IF BEDROCK WELLS WILL BE ABLE TO PROVIDE ADEQUATE SHORT-TERM OR LONG-TERM FLOW RATES FOR BUSINESS AND RESIDENTIAL USE. IN ADDITION, THE POTENTIAL EXISTS FOR CONTAMINATION TO BE DRAWN INTO THE BEDROCK AQUIFER VIA PUMPING FROM THE UPPER SAND AND GRAVEL AQUIFER. THE NO ACTION ALTERNATIVE OFFERS NO LONG-TERM EFFECTIVENESS AND PERMANENCE AS PRIVATE WELL USERS WOULD CONTINUE TO USE THE CONTAMINATED SAND AND GRAVEL AQUIFER FOR DRINKING WATER.

REDUCTION OF TOXICITY, MOBILITY OR VOLUME THROUGH TREATMENT

THIS CRITERION EVALUATES TREATMENT TECHNOLOGY PERFORMANCE IN THE REDUCTION OF CONTAMINANT TOXICITY, MOBILITY

OR VOLUME.

AS AN OPERABLE UNIT FOR A REPLACEMENT WATER SUPPLY ONLY, THIS REMEDIAL ACTION DOES NOT ADDRESS GROUNDWATER OR SOURCE REMEDIATION. THE ABILITY OF THE SELECTED REMEDY TO ACHIEVE A REDUCTION IN TOXICITY, MOBILITY OR VOLUME OF CONTAMINANTS WAS NOT A FACTOR IN THE REMEDY SELECTION PROCESS.

#### SHORT-TERM EFFECTIVENESS

SHORT-TERM EFFECTIVENESS IS ASSESSED THROUGH RISKS TO SITE WORKERS, THE COMMUNITY AND THE ENVIRONMENT DURING CONSTRUCTION OF THE REMEDIAL ACTION, AND THE LENGTH OF TIME BEFORE THE REMEDIAL ACTION CAN BE IMPLEMENTED.

THE ESTIMATED TIME FOR DESIGN AND CONSTRUCTION FOR ALTERNATIVES 2 THROUGH 6 VARY; HOWEVER, UNTIL A PERMANENT ALTERNATE WATER SUPPLY IS AVAILABLE TO THE AFFECTED AREA, THE BOTTLED WATER PROGRAM WILL CONTINUE. REGULATORY REQUIREMENTS AND ADMINISTRATIVE REVIEW OF DESIGN AND SYSTEM SPECIFICATIONS WILL IMPACT THE CONSTRUCTION SCHEDULE FOR ALL ALTERNATIVES, WITH THE EXCEPTION OF THE NO ACTION ALTERNATIVE WHICH CAN BE IMPLEMENTED IMMEDIATELY BUT PROVIDES NO SHORT-TERM EFFECTIVENESS.

UNDER ALTERNATIVE 4, THE ESTIMATED TIME TO COMPLETE INSTALLATION OF THE GAC TREATMENT UNITS IS SIX MONTHS; HOWEVER, AS PREVIOUSLY INDICATED, THIS ALTERNATIVE IS NOT A PERMANENT REMEDIAL ACTION. IN ADDITION, BEFORE INSTALLATION CAN BEGIN, THE SPECIFIC TREATMENT UNIT MUST BE APPROVED BY THE BUREAU OF PLUMBING WITHIN DILHR. PRIOR TO IMPLEMENTATION, WDNR'S BUREAU OF WATER SUPPLY MUST APPROVE THE GAC TREATMENT UNIT FOR EACH INDIVIDUAL HOME AND BUSINESS. THIS REVIEW AND APPROVAL PROCESS COULD TAKE SIGNIFICANT TIME GIVEN THE NUMBER OF TREATMENT UNITS REQUIRED TO SERVICE THE AFFECTED AREA AND LENGTHEN THE IMPLEMENTATION SCHEDULE.

ALTERNATIVES 2, 3 AND 6 WILL REQUIRE SIMILAR IMPLEMENTATION TIMEFRAMES WITH VARIABILITY GENERALLY ATTRIBUTED TO SYSTEM DESIGN, REVIEW AND APPROVAL BY APPROPRIATE STATE AGENCIES. BEFORE CONSTRUCTION CAN BEGIN, ALTERNATIVES 2, 3 AND 6 WILL REQUIRE APPROVAL FROM WDNR'S BUREAU OF WATER SUPPLY TO MAKE SURE THAT THE PROPOSED SYSTEM MEETS THE STATE'S MINIMUM DESIGN STANDARDS. SERVICE BY THE DISTRICT (ALTERNATIVE 2) WILL ALSO REQUIRE A PUBLIC HEARING BY THE PUBLIC SERVICE COMMISSION (PSC) FOR THE PURPOSE OF ESTABLISHING A RATE STRUCTURE.

THE MINIMUM TIME FOR IMPLEMENTATION OF ALTERNATIVE 2 IS 12-16 MONTHS.

CONSTRUCTION MAY TAKE LONGER FOR THIS ALTERNATIVE DUE TO SERVICE DUPLICATION AND THE CONSTRUCTION OF A WELL AND STORAGE FACILITIES FOR THE DISTRICT. UNDER ALTERNATIVE 3, ANNEXATION OF THE ENTIRE AFFECTED AREA IS A PREREQUISITE TO IMPLEMENTATION AND THE MINIMUM ESTIMATED TIME TO COMPLETION IS 15 MONTHS, DEPENDING ON THE ANNEXATION PROCESS. THE CITY OF EAU CLAIRE'S ESTIMATED TIME FOR IMPLEMENTATION OF ALTERNATIVE 6 IS NINE MONTHS FOLLOWING THE AVAILABILITY OF FUNDS, INCLUDING THE NECESSARY REVIEW OF PLANS BY STATE AGENCIES. THE ESTIMATED TIME TO COMPLETE CONSTRUCTION OF ALTERNATIVE 5 FOR THE ENTIRE AFFECTED AREA IS TWO YEARS AND ASSUMES CONTINUOUS EQUIPMENT AVAILABILITY.

NONE OF THE ALTERNATIVES PRESENT A SIGNIFICANT THREAT TO THE COMMUNITY OR TO LABOR DURING CONSTRUCTION. CONSTRUCTION ACTIVITIES ASSOCIATED WITH ALTERNATIVES 2, 3 AND 6 WOULD NOT ENCOUNTER ANY GROUNDWATER OR EXPECTED AREAS OF CONTAMINATION. WORKERS WOULD BE SUBJECT TO THE NORMAL AND CUSTOMARY RISKS ASSOCIATED WITH CONSTRUCTION, PIPELAYING AND ASSOCIATED ACTIVITIES, AND WOULD BE EXPECTED TO FOLLOW STANDARD SAFETY PRACTICES. FOR ALTERNATIVE 5, WELL DRILLERS WOULD BE REQUIRED TO COMPLY WITH THE PROTECTION LEVELS AND SAFETY MEASURES SPECIFIED IN THE APPROVED HEALTH AND SAFETY PLAN. FOR ALTERNATIVE 4, WORKERS WOULD BE SUBJECT TO THE NORMAL RISKS ASSOCIATED WITH THE INSTALLATION OF A GAC TREATMENT UNIT AND WOULD FOLLOW STANDARD SAFETY PRACTICES.

#### IMPLEMENTABILITY

THIS CRITERION CONSIDERS THE TECHNICAL AND ADMINISTRATIVE FEASIBILITY OF IMPLEMENTING AN ALTERNATIVE.

THE NO ACTION ALTERNATIVE IS EASILY IMPLEMENTED WITH NO ADMINISTRATIVE OR JURISDICTIONAL ISSUES AS RESIDENTS AND BUSINESSES WOULD RESUME USING THEIR PRIVATE WELLS FOR DRINKING WATER. WITH RESPECT TO THE OTHER ALTERNATIVES, IMPLEMENTABILITY IN CONJUNCTION WITH COMMUNITY ACCEPTANCE ARE THE KEY CRITERIA IN THE SELECTION

OF THE FINAL REMEDY.

THE TECHNOLOGIES ASSOCIATED WITH ALTERNATIVES 2, 3, 4 AND 6 ARE PROVEN AND RELIABLE, AND THE SYSTEMS ARE EASILY CONSTRUCTED AND OPERATED. THE TECHNOLOGY FOR ALTERNATIVE 5 IS DEMONSTRATED, BUT NOT UNDER SITE-SPECIFIC CONDITIONS.

THE SELECTED REMEDY, ALTERNATIVE 2, IS AN ANNEXATION-NEUTRAL SOLUTION OFFERING THE MOST IMPLEMENTABLE ALTERNATIVE THAT ACCOMMODATES THE PREFERENCES OF BUSINESSES AND RESIDENCES WITHIN THE AFFECTED AREA AND MANY MEMBERS OF THE GENERAL PUBLIC. IT IS RECOGNIZED BY US EPA AND WDNR THAT ANY OUTSTANDING OR FUTURE JURISDICTIONAL DISPUTES BETWEEN THE CITY OF EAU CLAIRE AND THE TOWN OF HALLIE REGARDING THE LEGALITY OF ANNEXATIONS OR THE PSC ORDER MAY AFFECT THE IMPLEMENTATION SCHEDULE FOR PORTIONS OF THE SELECTED REMEDY.

CONSTRUCTION OF ALTERNATIVES 3 AND 6 ARE EASILY ACCOMPLISHED DUE TO THE PROXIMITY OF THE EAU CLAIRE SYSTEM: HOWEVER, SUCCESSFUL IMPLEMENTATION IS LARGELY DEPENDENT UPON COMMUNITY ACCEPTANCE. ANNEXATION OF THE ENTIRE AFFECTED AREA IS A PREREQUISITE TO CONSTRUCTION AND IMPLEMENTATION OF ALTERNATIVE 3. ANNEXATION APPEARS TO BE UNACCEPTABLE TO TOWN OF HALLIE RESIDENTS AND RENDERS THIS ALTERNATIVE UNIMPLEMENTABLE. ALTERNATIVE 6 ELIMINATES THE REQUIREMENT FOR ANNEXATION, BUT IS ALSO UNIMPLEMENTABLE BECAUSE OF THE PSC DECISION WHICH AUTHORIZES THE DISTRICT TO SERVICE THOSE PORTIONS OF THE AFFECTED AREA UNDER ITS JURISDICTION. IN RESPONSE TO AN INQUIRY FROM THE PSC, EAU CLAIRE DECLINED TO BE THE PROVIDER OF WATER UTILITY SERVICE THROUGHOUT THE ENTIRE GEOGRAPHIC AREA OF THE DISTRICT ON AN ESSENTIALLY EQUIVALENT BASIS AS THE DISTRICT PROPOSES WITHOUT REQUIRING ANNEXATION. ALTHOUGH THE ENTIRE GEOGRAPHIC AREA OF THE DISTRICT ENCOMPASSES A MUCH LARGER AREA THAN THE AFFECTED AREA, THE UNWILLINGNESS OF EAU CLAIRE TO PROVIDE WATER SERVICE TO THE EXPANDED DISTRICT ALSO PRECLUDES EAU CLAIRE FROM SERVICING THE AFFECTED AREA. EAU CLAIRE HAS NOT RECEIVED THE NECESSARY AUTHORIZATION FROM THE PSC TO CONSTRUCT AND OPERATE A WATER DISTRIBUTION SYSTEM IN THE TOWN OF HALLIE.

FURTHERMORE, TOWN OF HALLIE ELECTED OFFICIALS VOICED STRONG OPPOSITION TO ANY ALTERNATIVE INVOLVING EAU CLAIRE. BASED ON RESEARCH CONDUCTED BY US EPA AND WDNR, IT WAS DETERMINED THAT SUCH OPPOSITION MAY JEOPARDIZE THE ABILITY TO IMPLEMENT ALTERNATIVE 6, EVEN WITH PSC APPROVAL OF EAU CLAIRE'S PROPOSAL.

THERE ARE ALSO SIGNIFICANT IMPLEMENTABILITY ISSUES WITH ALTERNATIVES 4 AND 5. FOR ALTERNATIVE 4, THIS TECHNOLOGY IS GENERALLY APPLIED TO A LIMITED NUMBER OF USERS IN AREAS NOT EASILY ACCESSED BY A CENTRAL DISTRIBUTION SYSTEM. THE GAC TREATMENT UNITS REQUIRE APPROVAL FROM DILHR AND THE PRIVATE WATER SUPPLY SECTION WITHIN WDNR'S BUREAU OF WATER SUPPLY. PROVISIONS MUST BE ARRANGED WITH EACH USER FOR ACCESS TO THE TREATMENT UNITS FOR REQUIRED MAINTENANCE AND MONITORING. COMMUNITY ACCEPTANCE IS ALSO A FACTOR LIMITING THE IMPLEMENTABILITY OF THIS ALTERNATIVE.

ALTERNATIVE 5, INDIVIDUAL WELL REPLACEMENTS, CAN BE IMPLEMENTED IMMEDIATELY AND INDIVIDUAL RESIDENCES AND BUSINESSES CAN BE CONNECTED AS THE WELLS ARE INSTALLED. AGAIN, COMMUNITY ACCEPTANCE IS A LIMITING FACTOR IN THE IMPLEMENTABILITY OF THIS ALTERNATIVE.

#### COST

THIS CRITERION COMPARES THE REMEDIAL ACTION OR CAPITAL COSTS, OPERATION AND MAINTENANCE COSTS AND PRESENT WORTH COSTS OF IMPLEMENTING THE VARIOUS ALTERNATIVES AT THE SITE.

COST COMPARISONS OF THE ALTERNATIVES ARE BASED ON EITHER ESTIMATED REMEDIAL ACTION COST OR PRESENT WORTH COST, DEPENDING ON THE ALTERNATIVE. UNDER ALTERNATIVES 2, 3 AND 6, OPERATION AND MAINTENANCE COSTS WILL BE THE RESPONSIBILITY OF THE WATER SYSTEM USERS THROUGH WATER BILLS. FOR THIS REASON, THE PRESENT WORTH COSTS ARE NOT AN ACCURATE BASIS FOR COMPARING THESE ALTERNATIVES. OPERATION AND MAINTENANCE COSTS FOR ALTERNATIVES 4 AND 5 WILL BE THE RESPONSIBILITY OF THE PARTY FUNDING THE REMEDIAL ACTION (US EPA OR RESPONSIBLE PARTY) AND ARE THEREFORE FACTORED INTO THE COMPARATIVE ANALYSIS.

WITH THE ABOVE INFORMATION IN MIND, THE MOST COSTLY ALTERNATIVE IS ALTERNATIVE 5, REPLACEMENT OF PRIVATE WELLS, WITH A 10-YEAR PRESENT WORTH VALUE PROJECTED AT \$4.4 MILLION. THIS IS DUE TO THE HIGH OPERATION AND MAINTENANCE COSTS OF APPROXIMATELY \$321,000 TO GO ALONG WITH IMPLEMENTATION COSTS OF \$2.4 MILLION. THERE ARE ALSO SIGNIFICANT UNCERTAINTIES ASSOCIATED WITH THIS ALTERNATIVE WHICH ARE REFLECTED IN THE HIGH OPERATION AND MAINTENANCE COSTS.

THE SECOND MOST COSTLY ALTERNATIVE IS THE SELECTED REMEDY, ALTERNATIVE 2. THE MINIMUM REMEDIAL ACTION COSTS OF \$2.4 MILLION ASSUMES 100 PERCENT OF THE AFFECTED AREA WILL BE SERVICED BY THE DISTRICT. ANNUAL OPERATION AND MAINTENANCE COSTS ARE APPROXIMATELY \$90,000 (\$80,000 FOR THE DISTRICT AND \$10,000 FOR MONITORING PRIVATE WELLS IMMEDIATELY OUTSIDE THE DISTRICT THAT ARE STILL IN USE). THE MAXIMUM REMEDIAL COST ESTIMATE OF \$2.6 MILLION ASSUMES THE SAME CONDITIONS PRESENTED IN THE PROPOSED PLAN AND ACCOUNTS FOR CONSTRUCTION DUPLICATION NECESSARY TO SERVICE THE AREAS THAT ANNEXED TO EAU CLAIRE. ADDITIONAL ANNEXATIONS REQUIRING SERVICE FROM EAU CLAIRE WILL CAUSE ADDITIONAL INCREASES IN THE TOTAL REMEDIAL ACTION COSTS AND DECREASE OPERATION AND MAINTENANCE COSTS FOR ALTERNATIVE 2. WELL CLOSURE AND ABANDONMENT ACCOUNTS FOR APPROXIMATELY \$100,000 OF THE TOTAL REMEDIAL ACTION COST AND WILL NOT VARY WITH THE SIZE OF THE RESPECTIVE SERVICE AREAS.

IT IS NOTED THAT REMEDIAL ACTION COSTS MAY INCREASE WITH FURTHER ANNEXATIONS OF THE AFFECTED AREA BY EAU CLAIRE. THESE ACTIONS BY EAU CLAIRE APPEAR TO FOSTER THE VERY SAME TYPE OF "UNORDERLY DEVELOPMENT" WHICH EAU CLAIRE ACCUSED THE DISTRICT OF IN ITS EXPANSION BEYOND THE AFFECTED AREA.

ALTERNATIVES 3 AND 6 HAVE IDENTICAL COSTS AS THE ONLY DIFFERENCE BETWEEN THEM IS ANNEXATION. IMPLEMENTATION COSTS ARE ESTIMATED AT \$1.7 MILLION WITH ANNUAL OPERATION AND MAINTENANCE COSTS OF APPROXIMATELY \$41,000 AND A 10-YEAR PRESENT WORTH VALUE OF \$2 MILLION. ALTERNATIVES 3 AND 6 PROVIDE THE SAME SERVICES AS THE SELECTED REMEDY; HOWEVER, THE LOWER IMPLEMENTATION COSTS ARE ATTRIBUTED TO AN EXISTING SYSTEM WITH ADEQUATE SUPPLY AND STORAGE FACILITIES ALREADY IN PLACE. THE SELECTED REMEDY IS A NEW SYSTEM REQUIRING INSTALLATION OF A WELL, AND THE CONSTRUCTION OF STORAGE FACILITIES AND WATER MAINS FROM THE WELL TO THE SERVICE AREA. THERE IS ALSO NO NEED FOR SERVICE DUPLICATION UNDER ALTERNATIVES 3 AND 6. OPERATION AND MAINTENANCE COSTS ARE SIGNIFICANTLY LOWER BECAUSE SERVICE IS PROVIDED BY AN ESTABLISHED SYSTEM WITH A LARGER CUSTOMER BASE.

WITH THE EXCEPTION OF THE NO ACTION ALTERNATIVE, ALTERNATIVE 4 HAS THE LOWEST IMPLEMENTATION COSTS, APPROXIMATELY \$417,000. HOWEVER, THE HIGH OPERATION AND MAINTENANCE COSTS OF APPROXIMATELY \$248,000 MAKE THE 10-YEAR PRESENT WORTH VALUE \$1.9 MILLION. HIGH OPERATION AND MAINTENANCE COSTS ARE NECESSARY FOR REQUIRED MAINTENANCE OF THE GAC TREATMENT UNITS AND THE NECESSARY MONITORING TO ENSURE EFFECTIVENESS OF TREATMENT. THIS ALTERNATIVE WAS ELIMINATED FROM CONSIDERATION BECAUSE IT DOES NOT OFFER PERMANENCE, IS DISCOURAGED BY WDNR'S BUREAU OF PUBLIC WATER SUPPLY AND SUFFERS SIGNIFICANT ACCESS PROBLEMS FOR PROPER MAINTENANCE OF THE TREATMENT UNITS BY QUALIFIED PERSONNEL.

#### MODIFYING CRITERIA

#### STATE ACCEPTANCE

THE STATE OF WISCONSIN HAS BEEN AN ACTIVE AND SUPPORTING PARTICIPANT IN THE REMEDIAL PROCESS FOR THIS SITE. THE STATE IS A SIGNATORY TO THE RI/FS CONSENT ORDER WITH NPI AND SUPPORTED US EPA'S DECISION TO ISSUE A UNILATERAL ORDER TO NPI IN APRIL 1989, TO ADDRESS PRIVATE WELL CONTAMINATION IN THE TOWN OF HALLIE. THE STATE OF WISCONSIN CONCURS WITH THE SELECTED OPERABLE UNIT REMEDIAL ACTION FOR A PERMANENT AND SAFE ALTERNATE WATER SUPPLY FOR THE AFFECTED AREA IN THE TOWN OF HALLIE. THE STATE DOES NOT SUPPORT ALTERNATIVES 4 OR 5 BECAUSE OF IMPLEMENTATION ISSUES AND NEITHER ALTERNATIVE PROVIDES LONG-TERM EFFECTIVENESS AND PERMANENCE.

#### COMMUNITY ACCEPTANCE

A REPLACEMENT WATER SUPPLY DIRECTLY IMPACTS A COMMUNITY AND FEEDBACK FROM RESIDENTS AND BUSINESSES IS AN IMPORTANT ELEMENT IN THE SELECTION OF THE FINAL REMEDY. BECAUSE OF COMMUNITY INTEREST AND THE NATURE OF THIS OPERABLE UNIT, THE PUBLIC COMMENT PERIOD RAN FOR 60 DAYS, FROM JANUARY 3, 1990 THROUGH MARCH 4, 1990. THE INITIAL 45-DAY COMMENT PERIOD WAS EXTENDED 15 DAYS TO PROVIDE THE PUBLIC ADDITIONAL TIME TO COMMENT ON EAU CLAIRE'S PROPOSAL TO EXTEND MUNICIPAL WATER WITHOUT REQUIRING ANNEXATION AND TO ACCOMMODATE THE FEBRUARY 19, 1990 PSC HEARING. INFORMATION COMPILED AS PART OF THE PSC'S RECORD WAS SUBSEQUENTLY INCORPORATED INTO US EPA'S ADMINISTRATIVE RECORD FOR THE SITE AND INCLUDED ORAL AND WRITTEN TESTIMONY AND COMMENTS SUBMITTED DURING THE PSC HEARING.

A LARGE MAJORITY OF CITIZENS SUBMITTING COMMENTS INDICATED SUPPORT FOR US EPA'S PREFERRED ALTERNATIVE. OF THE 57 AFFECTED AREA RESIDENTS AND BUSINESSES SUBMITTING COMMENTS TO US EPA OR APPEARING BEFORE THE PSC HEARING, 38 (66.7 PERCENT) SUPPORTED THE US EPA'S PREFERRED ALTERNATIVE. THIRTY-SIX OF THE 46 (78.3 PERCENT) COMMENTS RECEIVED FROM RESIDENCES AND BUSINESSES OUTSIDE THE AFFECTED AREA ALSO SUPPORTED THE PREFERRED

ALTERNATIVE. A MINORITY OF RESIDENTS AND BUSINESSES WITHIN THE AFFECTED AREA, AND TO A LESSER DEGREE IN THE SURROUNDING COMMUNITY, EITHER OPPOSED THE PREFERRED ALTERNATIVE OR SUPPORTED OTHER ALTERNATIVES. OF THE 57 AFFECTED AREA COMMENTS, 16 (28.1 PERCENT) OPPOSED THE PREFERRED ALTERNATIVE OR SUPPORTED ONE OF THE OTHER ALTERNATIVES, AND 3 (5.2 PERCENT) DID NOT INDICATE A PREFERENCE. OF THE 46 COMMENTS FROM OUTSIDE THE AFFECTED AREA, 7 (15.2 PERCENT) OPPOSED THE PREFERRED ALTERNATIVE OR SUPPORTED ANOTHER ALTERNATIVE. THREE (6.5 PERCENT) DID NOT INDICATE A PREFERENCE.

NUMEROUS RESIDENTS HAVE VOICED CONCERN ABOUT THE DECLINE IN PROPERTY VALUES IN THE AFFECTED AREA BECAUSE OF THE GROUNDWATER CONTAMINATION AND MEDIA EXPOSURE. REAL ESTATE VALUES WERE NOT A FACTOR IN SELECTING A FINAL REMEDY, ALTHOUGH IT IS US EPA'S BELIEF THAT A COMMUNITY-ACCEPTED DRINKING WATER SUPPLY WILL HELP RESTORE DEPRESSED PROPERTY VALUES.

THE PSC ALSO RECOGNIZED THE IMPORTANCE OF COMMUNITY ACCEPTANCE AND ISSUED THE ORDER AUTHORIZING THE DISTRICT AS THE WATER UTILITY TO PROVIDE DRINKING WATER TO THE MAJORITY OF THE AFFECTED AREA.

AS PART OF THE ROD, THE RESPONSIVENESS SUMMARY PRESENTS BACKGROUND INFORMATION ON COMMUNITY INVOLVEMENT AND CATEGORIZES THE PUBLIC COMMENTS RECEIVED DURING THE PUBLIC COMMENT PERIOD AND US EPA'S RESPONSES TO THE COMMENTS.

#### SUMMARY OF COMPARISON

AS AN OPERABLE UNIT FOR A REPLACEMENT DRINKING WATER SUPPLY, PROTECTION OF THE ENVIRONMENT AND REDUCTION IN TOXICITY, MOBILITY AND VOLUME WERE NOT PART OF THE COMPARATIVE ANALYSIS. FUTURE OPERABLE UNITS WILL ADDRESS PROTECTION OF THE ENVIRONMENT BY SOURCE CONTROL AND GROUNDWATER REMEDIATION. ANY REDUCTION IN TOXICITY, MOBILITY OR VOLUME OF CONTAMINANTS IS ONLY INCIDENTAL AND NOT A SPECIFIC COMPONENT OR OBJECTIVE OF THIS REMEDIAL ACTION.

UNDER ALTERNATIVE 1, THE NO ACTION ALTERNATIVE, THE BOTTLED WATER WOULD BE DISCONTINUED AND RESIDENCES AND BUSINESSES WOULD RESUME USING THEIR PRIVATE WELLS AS THE SOURCE OF DRINKING WATER. GIVEN THE CONDITIONS AT THE SITE AND THE CONTAMINANTS OF CONCERN, THE NO ACTION ALTERNATIVE IS NOT CONSISTENT WITH THE REMEDIAL ACTION OBJECTIVE OF PROVIDING A PERMANENT AND ALTERNATE WATER SUPPLY TO THE AFFECTED AREA THAT PROTECTS HUMAN HEALTH. IT DOES NOT SATISFY THE THRESHOLD CRITERIA OF PROTECTION OF HUMAN HEALTH AND COMPLIANCE WITH ARARS.

ALTERNATIVE 4, INDIVIDUAL GAC TREATMENT UNITS, HAS THE LOWEST CONSTRUCTION COSTS; HOWEVER, THIS ALTERNATIVE DOES NOT OFFER THE DEGREE OF PERMANENCE TO SATISFY THE REMEDIAL ACTION OBJECTIVE AND IS ELIMINATED FROM FURTHER CONSIDERATION. THERE ARE ALSO SIGNIFICANT IMPLEMENTABILITY AND COMMUNITY ACCEPTANCE ISSUES ASSOCIATED WITH THIS ALTERNATIVE.

ALTERNATIVE 5 WAS ALSO ELIMINATED FROM FURTHER CONSIDERATION BECAUSE OF UNCERTAINTIES IN ITS ABILITY TO PROVIDE A LONG-TERM AND RELIABLE SOURCE OF DRINKING WATER. IN ADDITION TO HIGH CONSTRUCTION COSTS, OPERATION AND MAINTENANCE COSTS ARE HIGH WHICH REFLECT THE EXTENSIVE MONITORING REQUIRED. AGAIN, IMPLEMENTABILITY AND COMMUNITY ACCEPTANCE ARE KEY CRITERIA LIMITING ITS APPLICABILITY.

THE REMAINING ALTERNATIVES; COMBINATION HALLIE SANITARY DISTRICT AND CITY OF EAU CLAIRE (ALTERNATIVE 2), CITY OF EAU CLAIRE WITH ANNEXATION (ALTERNATIVE 3), AND CITY OF EAU CLAIRE WITHOUT ANNEXATION (ALTERNATIVE 6) OFFER EQUAL PROTECTION OF PUBLIC HEALTH, AND LONG-TERM EFFECTIVENESS AND PERMANENCE. THE ANNEXATION COMPONENT OF ALTERNATIVE 3 AND THE ABSENCE OF PSC APPROVAL FOR ALTERNATIVE 6 RENDER BOTH ALTERNATIVES UNIMPLEMENTABLE.

FOR DISCUSSION PURPOSES ONLY AND ASSUMING ALTERNATIVES 2, 3 AND 6 WERE IMPLEMENTABLE, THERE ARE SLIGHT DIFFERENCES IN CONSTRUCTION TIMETABLES DUE TO LEGAL AND ADMINISTRATIVE REQUIREMENTS. ASSUMING THERE ARE NO ADDITIONAL JURISDICTIONAL DISPUTES BETWEEN HALLIE AND EAU CLAIRE OVER THE SERVICE AREA, AND TIMELY REVIEW AND APPROVAL OF SYSTEM DESIGN IS PROVIDED BY APPROPRIATE STATE AGENCIES, ALTERNATIVE 6 COULD PROBABLY BE IMPLEMENTED MORE QUICKLY DUE TO EASE OF CONSTRUCTION. ALTERNATIVES 2 AND 3 WILL LIKELY HAVE SIMILAR IMPLEMENTATION SCHEDULES. ALTHOUGH MORE CONSTRUCTION IS REQUIRED FOR ALTERNATIVE 2, IT IS EXPECTED THIS WOULD BE MORE THAN OFFSET BY THE TIME REQUIRED FOR THE AFFECTED AREA TO ANNEX TO EAU CLAIRE BEFORE

CONSTRUCTION COULD BEGIN.

ALTERNATIVES 2, 3 AND 6 WILL COMPLY WITH ARARS BY PROVIDING A WATER SUPPLY THAT MEETS FEDERAL AND STATE DRINKING WATER STANDARDS. STATE AND LOCAL CODES WILL GOVERN DESIGN SPECIFICATIONS, THE REVIEW AND APPROVAL PROCESS, AND CONSTRUCTION OF THE WATER SYSTEMS.

THE SELECTED REMEDY, ALTERNATIVE 2, IS THE MOST COSTLY ALTERNATIVE WITH ESTIMATED REMEDIAL ACTION OR IMPLEMENTATION COSTS OF \$2.4-2.6 MILLION, ANNUAL OPERATION AND MAINTENANCE COSTS OF APPROXIMATELY \$90,000 AND A 10-YEAR PRESENT WORTH VALUE OF \$3-3.2 MILLION. ALTERNATIVES 3 AND 6 HAVE IDENTICAL IMPLEMENTATION COSTS OF APPROXIMATELY \$1.7 MILLION, ANNUAL OPERATION AND MAINTENANCE COSTS OF \$41,000 AND 10-YEAR PRESENT WORTH VALUES OF \$2 MILLION. THE HIGHER COSTS ASSOCIATED WITH ALTERNATIVE 2 CAN BE ATTRIBUTED TO THE CONSTRUCTION OF NEW FACILITIES: PRODUCTION WELL, RESERVOIR, PUMP HOUSE, ETC.; AND THE DUPLICATION OF SERVICES WITHIN THE AFFECTED AREA DUE TO ANNEXATIONS TO EAU CLAIRE. OPERATION AND MAINTENANCE COSTS OF THE SELECTED REMEDY ARE ALSO HIGHER THAN THOSE FOR ALTERNATIVES 3 AND 6 BUT WERE NOT A FACTOR IN SELECTING THE FINAL REMEDY.

COMMUNITY ACCEPTANCE AND IMPLEMENTABILITY WERE THE PRIMARY CRITERIA SUPPORTING THE PREFERRED ALTERNATIVE AND SIMILARLY THE SELECTION OF THE OPERABLE UNIT REMEDY. COMMENTS RECEIVED DURING THE PUBLIC COMMENT PERIOD INDICATED STRONG SUPPORT FROM THE PREFERRED REMEDY. THE PREREQUISITE OF ANNEXATION JEOPARDIZES THE ABILITY TO IMPLEMENT ALTERNATIVE 3. ALTERNATIVE 6 IS NOT IMPLEMENTABLE BECAUSE THE CITY OF EAU CLAIRE DOES NOT HAVE AUTHORITY FROM THE PSC TO SERVICE THOSE PORTIONS OF THE AFFECTED AREA OUTSIDE ITS MUNICIPAL BOUNDARIES WITH DRINKING WATER. ALTERNATIVE 2 RECOGNIZES THE PREFERENCES OF BUSINESSES AND RESIDENCES WHO CHOSE TO ANNEX TO AND RECEIVE SERVICES FROM EAU CLAIRE. FOR THE ABOVE REASONS, ALTERNATIVE 2 IS SELECTED AS THE FINAL REMEDY WITH US EPA AND WDNR BELIEVING IT TO BE THE ONLY IMPLEMENTABLE ALTERNATIVE.

#### **#SR**

#### **SELECTED REMEDY**

PUBLIC SERVICE COMMISSION ORDER 2428-CW-100 DATED JUNE 14, 1990, GRANTS AUTHORITY FOR TOWN OF HALLIE SANITARY DISTRICT TO CONSTRUCT WATER SUPPLY FACILITIES AND OPERATE AS A WATER PUBLIC UTILITY. BASED ON THE PSC ORDER AND THE FACT THAT PORTIONS OF THE AFFECTED AREA HAVE ANNEXED TO THE CITY OF EAU CLAIRE, THE SELECTED REMEDY IS ALTERNATIVE 2, HALLIE SANITARY DISTRICT NO. 1 WITH EAU CLAIRE SUPPLY FOR THE AREAS ANNEXED BY THE CITY. THE MAJOR COMPONENTS OF THE SELECTED REMEDY ARE:

- \* CONSTRUCTION OF A WELL FIELD, STORAGE FACILITIES AND DISTRIBUTION SYSTEM TO SERVICE BUSINESSES AND RESIDENCES WITHIN THE AFFECTED AREA THAT ARE PART OF THE DISTRICT;
- \* EXTENSION OF MUNICIPAL WATER SERVICE FROM THE CITY OF EAU CLAIRE TO BUSINESSES AND RESIDENCES WITHIN THE AFFECTED AREA THAT HAVE ANNEXED TO EAU CLAIRE;
- \* CLOSURE AND ABANDONMENT OF ALL EXISTING PRIVATE WELLS WITHIN THE AFFECTED AREA THAT ARE FINISHED IN THE CONTAMINATED AQUIFER; AND
- \* ANNUAL MONITORING OF US EPA AND WDNR-DESIGNATED PRIVATE WELLS IMMEDIATELY OUTSIDE THE AFFECTED AREA THAT ARE STILL USED AS A DRINKING WATER SUPPLY TO ENSURE CONTINUED QUALITY OF DRINKING WATER AND MONITOR POTENTIAL MIGRATION OF THE CONTAMINANT PLUME.

FOR THE DISTRICT PORTION OF THE SELECTED REMEDY, THE PSC ORDER SPECIFIES THE FOLLOWING CONDITIONS:

1. THAT PRIOR TO CONSTRUCTION, PLANS AND SPECIFICATIONS BE SUBMITTED TO, AND APPROVED BY, THE WDNR FOR ALL ITEMS INCLUDED IN THIS PROJECT.

2. THAT A TABULATION OF THE BIDS RECEIVED, WITH A NOTATION OF THE BIDS ACCEPTED, SHALL BE SUBMITTED TO THE PSC.
3. THAT INITIAL RATES BE PRESCRIBED AT A LATER DATE IN A SEPARATE DOCKET. THE UTILITY SHALL NOTIFY THE PSC APPROXIMATELY SIX MONTHS PRIOR TO COMMENCEMENT OF SERVICE, REQUESTING THAT A HEARING BE SCHEDULED TO ESTABLISH EQUITABLE RATES FOR WATER SERVICE.
4. THAT UPON COMPLETION OF THE PROJECT, THE DATE THE FACILITIES ARE PLACED IN SERVICE AND FINAL COSTS SEGREGATED BY PLANT ACCOUNTS, SHALL BE SUBMITTED TO THE PSC.
5. THAT THE CERTIFICATE ISSUED HEREIN IS VALID ONLY IF CONSTRUCTION IS STARTED WITHIN ONE YEAR OF THE DATE HEREOF.
6. THAT JURISDICTION IS RETAINED.

THE EAU CLAIRE COMPONENT WILL ALSO REQUIRE WDNR APPROVAL OF THE SYSTEM DESIGN AND SPECIFICATIONS BEFORE MUNICIPAL WATER SERVICE CAN BE EXTENDED INTO THE AFFECTED AREA.

ALL EXISTING WELLS WITHIN THE AFFECTED AREA WILL BE CLOSED AND ABANDONED IN ACCORDANCE WITH WDNR WELL ABANDONMENT REQUIREMENTS. INDIVIDUAL WELL OWNERS MAY SEEK A VARIANCE TO WELL ABANDONMENT BY DEMONSTRATING A NEED FOR CONTINUED USE OF THE WELL FOR NON-HUMAN CONSUMPTION, SUBJECT TO ANY RESTRICTIONS IMPOSED BY THE TOWN OF HALLIE OR CITY OF EAU CLAIRE, DEPENDING ON THE LOCATION OF THE PRIVATE WELL. THE PRIVATE WELL WOULD REQUIRE INSPECTION BY THE WDNR TO MAKE SURE THE WELL COMPLIES WITH STATE CONSTRUCTION CODES.

PRIVATE WELLS IMMEDIATELY OUTSIDE THE AFFECTED AREA THAT REMAIN AS A SOURCE OF DRINKING WATER WILL BE SAMPLED SEMI-ANNUALLY TO MONITOR GROUNDWATER QUALITY AND THE POTENTIAL FOR MOVEMENT OF THE CONTAMINATION PLUME BEYOND THE AFFECTED AREA. THESE WELLS WILL BE DESIGNATED BY US EPA AND WDNR.

THE PROJECTED REMEDIAL ACTION COSTS FOR THE SELECTED REMEDY ARE \$2.6 MILLION AND ARE BROKEN DOWN AS FOLLOWS:

- \* \$2 MILLION FOR THE DISTRICT TO SERVICE BUSINESSES AND RESIDENCES IN THE AFFECTED AREA THAT ARE ALSO PART OF THE DISTRICT;
- \* \$500,000 FOR EAU CLAIRE TO SERVICE BUSINESSES AND RESIDENCES IN THE AFFECTED AREA THAT HAVE ANNEXED TO EAU CLAIRE; AND
- \* \$107,000 FOR CLOSURE AND ABANDONMENT OF PRIVATE WELLS IN THE AFFECTED AREA.

ANNUAL OPERATION AND MAINTENANCE COSTS ARE ESTIMATED AT \$90,000 AND INCLUDE APPROXIMATELY \$10,000 FOR MONITORING PRIVATE WELLS IMMEDIATELY OUTSIDE THE AFFECTED AREA THAT CONTINUE TO BE USED FOR DRINKING WATER.

THE RESPECTIVE COST ESTIMATES FOR THE DISTRICT AND EAU CLAIRE PORTIONS OF THE SELECTED REMEDY ARE BASED ON CONDITIONS AND ASSUMPTIONS PRESENTED IN THE PROPOSED PLAN ISSUED ON JANUARY 4, 1990, AND INCLUDED IN THE ADMINISTRATIVE RECORD.

THE SELECTED REMEDY ACCOMMODATES THE PREFERENCES OF RESIDENCES AND BUSINESSES IN THE AFFECTED AREA WHO HAVE ANNEXED TO EAU CLAIRE. US EPA RECOGNIZES THAT THE MOST COST-EFFECTIVE REMEDY IS THE DISTRICT, AS AUTHORIZED BY THE PSC, TO PROVIDE DRINKING WATER TO THE ENTIRE AFFECTED AREA. DUPLICATION OF SERVICES AND ASSOCIATED COST INCREASES ARE THE RESULT OF ANNEXATIONS BY THE CITY OF EAU CLAIRE AND ULTIMATELY BURDENS THE FUNDING PARTY(IES) WITH UNNECESSARY COSTS.

USEPA'S AND WDNR'S PRIMARY GOAL HAS BEEN AND CONTINUES TO BE TO PROVIDE A PERMANENT AND SAFE ALTERNATE DRINKING WATER SUPPLY TO THE AFFECTED AREA. UNDER THE CIRCUMSTANCES, THE SELECTED REMEDY IS THE ONLY

IMPLEMENTABLE ALTERNATIVE.

#SD

## STATUTORY DETERMINATIONS

UNDER ITS LEGAL AUTHORITIES, US EPA'S PRIMARY RESPONSIBILITY AT SUPERFUND SITES IS TO UNDERTAKE REMEDIAL ACTIONS THAT ACHIEVE ADEQUATE PROTECTION OF HUMAN HEALTH AND THE ENVIRONMENT. IN ADDITION, SECTION 121 OF CERCLA ESTABLISHES SEVERAL OTHER STATUTORY REQUIREMENTS AND PREFERENCES. THESE SPECIFY THAT WHEN COMPLETE, THE SELECTED REMEDIAL ACTION MUST COMPLY WITH ARARS UNDER FEDERAL AND STATE ENVIRONMENTAL LAWS, UNLESS A STATUTORY WAIVER IS JUSTIFIED. THE SELECTED REMEDY MUST ALSO BE COST EFFECTIVE AND UTILIZE PERMANENT SOLUTIONS AND ALTERNATIVE TREATMENT OR RESOURCE RECOVERY TECHNOLOGIES TO THE MAXIMUM EXTENT PRACTICABLE. FINALLY, THE STATUTE INCLUDES A PREFERENCE FOR REMEDIES THAT EMPLOY TREATMENT THAT PERMANENTLY AND SIGNIFICANTLY REDUCE THE TOXICITY, MOBILITY OR VOLUME OF HAZARDOUS SUBSTANCES, POLLUTANTS AND CONTAMINANTS. THE FOLLOWING SECTIONS DISCUSS HOW THE SELECTED REMEDY, WHERE APPLICABLE, MEETS THE STATUTORY REQUIREMENTS AND PREFERENCES.

### PROTECTION OF HUMAN HEALTH AND THE ENVIRONMENT

THE SELECTED REMEDY PROVIDES FOR PROTECTION OF HUMAN HEALTH BY ELIMINATING CONSUMPTION OF AND EXPOSURE TO CONTAMINATED GROUNDWATER WITHIN THE AFFECTED AREA. AS A PUBLIC WATER SUPPLY SYSTEM, THE SELECTED REMEDY IS A PROVEN AND RELIABLE METHOD OF PROVIDING A PERMANENT AND SAFE DRINKING WATER SUPPLY THROUGH REQUIRED TREATMENT AND MONITORING. AN ELEMENT OF THE SELECTED REMEDY IS LONG-TERM MONITORING OF PRIVATE WELLS IMMEDIATELY OUTSIDE THE AFFECTED AREA THAT CONTINUE TO BE USED FOR DRINKING WATER.

THE REMEDIAL OBJECTIVE OF THIS OPERABLE UNIT IS PROTECTION OF HUMAN HEALTH ONLY. PROTECTION OF THE ENVIRONMENT WILL BE ACHIEVED BY FUTURE OPERABLE UNITS THAT ADDRESS REMEDIATION OF CONTAMINATED GROUNDWATER AND ON-SITE SOURCES OF CONTAMINATION.

### COMPLIANCE WITH APPLICABLE OR RELEVANT AND APPROPRIATE REQUIREMENTS (ARARS)

THE SELECTED REMEDY WILL COMPLY WITH ALL IDENTIFIED FEDERAL ARARS AND MORE STRINGENT STATE LAWS, INCLUDING LOCAL CODES GOVERNING THE DESIGN AND CONSTRUCTION OF COMMUNITY WATER SYSTEMS. TABLE 3 SUMMARIZES THE ARARS THAT WILL BE MET BY THE SELECTED REMEDY. THIS OPERABLE UNIT ONLY PROVIDES FOR A REPLACEMENT DRINKING WATER SUPPLY AND DOES NOT ADDRESS GROUNDWATER REMEDIATION OR ESTABLISH CLEAN-UP LEVELS OR GOALS FOR SUBSTANCES IN GROUNDWATER. THEREFORE, NR 140 WAC AND CH 160 WIS. STATS. ARE NOT ARARS FOR THIS OPERABLE UNIT; HOWEVER, THEY DO SERVE AS A BASIS FOR THIS REMEDIAL ACTION. ALL ARARS IDENTIFIED FOR THE SELECTED REMEDY ARE APPLICABLE. THE RESOURCE CONSERVATION AND RECOVERY ACT (RCRA) LAND DISPOSAL RESTRICTIONS DO NOT APPLY TO THIS OPERABLE UNIT REMEDIAL ACTION.

### COST EFFECTIVENESS

BASED ON THE PSC ORDER WHICH AUTHORIZES THE DISTRICT TO CONSTRUCT AND OPERATE AS A WATER DISTRICT UTILITY, THE SELECTED REMEDY IS THE ONLY IMPLEMENTABLE ALTERNATIVE. SERVICE TO THE ENTIRE AFFECTED AREA CAN BE ACCOMPLISHED MOST EFFICIENTLY AND AT LOWER COST BY THE DISTRICT; HOWEVER, THE REMEDY PROVIDES FOR EAU CLAIRE TO SERVICE BUSINESSES AND RESIDENCES WHICH HAVE ANNEXED TO EAU CLAIRE. THE DUPLICATION OF SERVICES NECESSARY TO IMPLEMENT THE EAU CLAIRE PORTION OF THE SELECTED PORTION OF THE SELECTED REMEDY INCREASES THE TOTAL REMEDIAL ACTION COSTS.

### UTILIZATION OF PERMANENT SOLUTION AND ALTERNATIVE TREATMENT TECHNOLOGIES TO THE MAXIMUM EXTENT PRACTICABLE

US EPA AND THE STATE OF WISCONSIN HAVE DETERMINED THAT THE SELECTED REMEDY REPRESENTS THE MAXIMUM EXTENT TO WHICH PERMANENT SOLUTIONS CAN BE UTILIZED IN THE MOST COST-EFFECTIVE MANNER TO ADDRESS PRIVATE WELL CONTAMINATION IN THE AFFECTED AREA. OF THE ALTERNATIVES THAT ARE PROTECTIVE OF HUMAN HEALTH AND THE ENVIRONMENT AND COMPLY WITH ARARS, US EPA AND THE STATE HAVE DETERMINED THAT THE SELECTED REMEDY PROVIDES THE BEST BALANCE OF TRADEOFF IN TERMS OF LONG-TERM EFFECTIVENESS AND PERMANENCE, SHORT-TERM EFFECTIVENESS, IMPLEMENTABILITY, COST, AND CONSIDERATION OF STATE AND COMMUNITY ACCEPTANCE.



THIS OPERABLE UNIT DOES NOT ADDRESS THE REDUCTION IN TOXICITY, MOBILITY OR VOLUME ACHIEVED THROUGH TREATMENT. FUTURE OPERABLE UNIT(S) WILL SPECIFICALLY ADDRESS THE REMEDIATION OF ON-SITE SOURCES AND CONTAMINATED SOILS AND GROUNDWATER WITH RESPECT TO APPLICABLE STATUTORY REQUIREMENTS.

#### PREFERENCE FOR TREATMENT

AS A REPLACEMENT WATER SUPPLY FOR THE AFFECTED AREA, THIS OPERABLE UNIT DOES NOT ADDRESS THE PREFERENCE FOR TREATMENT. THIS STATUTORY PREFERENCE WILL BE EVALUATED IN FUTURE OPERABLE UNITS THAT SPECIFICALLY ADDRESS CONTAMINATION AT THE SITE.

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#### RESPONSIVENESS SUMMARY

THIS RESPONSIVENESS SUMMARY HAS BEEN PREPARED TO MEET THE REQUIREMENTS OF SECTIONS 113(K)(2)(B)(IV) AND 117(B) OF THE COMPREHENSIVE ENVIRONMENTAL RESPONSE, COMPENSATION AND LIABILITY ACT OF 1980, AS AMENDED BY THE SUPERFUND AMENDMENTS AND REAUTHORIZATION ACT OF 1986 (CERCLA), WHICH REQUIRES THE UNITED STATES ENVIRONMENTAL AGENCY (US EPA) TO RESPOND "...TO EACH OF THE SIGNIFICANT COMMENTS, CRITICISMS, AND NEW DATA SUBMITTED IN WRITTEN OR ORAL PRESENTATIONS" ON A PROPOSED PLAN FOR REMEDIAL ACTION. THIS RESPONSIVENESS SUMMARY ADDRESSES CONCERNS EXPRESSED BY THE PUBLIC, POTENTIALLY RESPONSIBLE PARTIES (PRPS) AND GOVERNMENTAL BODIES IN THE WRITTEN AND ORAL COMMENTS RECEIVED BY US EPA ON THE PREFERRED REMEDY FOR A PERMANENT ALTERNATE WATER SUPPLY FOR THE AFFECTED AREA IN THE TOWN OF HALLIE.

AT THE TIME OF THE PUBLIC COMMENT PERIOD, US EPA RECOMMENDED AN ALTERNATIVE FOR THE NATIONAL PRESTO INDUSTRIES, INC. (NPI) SUPERFUND SITE (SITE) IN EAU CLAIRE, WISCONSIN. THIS ALTERNATIVE ADDRESSED THE GROUNDWATER CONTAMINATION OF PRIVATE DRINKING WATER WELLS NEAR THE SITE IN WHAT IS DEFINED AS THE "AFFECTED AREA." THE PREFERRED ALTERNATIVE, AS SPECIFIED IN THE PROPOSED PLAN, INVOLVED TWO INDEPENDENT WATER DISTRIBUTION SYSTEMS TO PROVIDE A PERMANENT WATER SUPPLY FOR THE AFFECTED AREA, HALLIE SANITARY DISTRICT NO. 1 (DISTRICT) AND THE CITY OF EAU CLAIRE. IN ADDITION, EXISTING WELLS WOULD BE CLOSED AND ABANDONED PURSUANT TO STATE REQUIREMENTS. PRIVATE WELL OWNERS COULD REQUEST A VARIANCE FROM THE STATE WHEREBY THEY WOULD BE PERMITTED TO USE THEIR WELLS FOR NON-HUMAN CONSUMPTION, UNLESS OTHERWISE DIRECTED BY THE LOCAL GOVERNING BODY.

JUDGING FROM THE COMMENTS RECEIVED DURING THE PUBLIC COMMENT PERIOD, THE SELECTED REMEDY SPECIFIED IN THE RECORD OF DECISION (ROD) IS SUPPORTED BY RESIDENTS OF THE AFFECTED AREA, RESIDENTS OF THE TOWN OF HALLIE AND THE HALLIE TOWN BOARD. THE WISCONSIN DEPARTMENT OF NATURAL RESOURCES (WDNR) ALSO CONCURS WITH THE SELECTED REMEDY. A LARGE MAJORITY OF CITIZENS SUBMITTING COMMENTS INDICATED SUPPORT FOR THE PREFERRED ALTERNATIVE. OF THE 57 AFFECTED AREA RESIDENTS SUBMITTING COMMENTS, INCLUDING THOSE MADE ORALLY AT US EPA'S PUBLIC MEETING ON JANUARY 18, 1990 OR APPEARING BEFORE THE PUBLIC SERVICE COMMISSION (PSC) OF WISCONSIN HEARING ON FEBRUARY 19, 1990 REGARDING THE PROPOSED DISTRICT, 38 (66.7 PERCENT) SUPPORTED THE PREFERRED ALTERNATIVE. THIRTY-SIX OF THE 46 (78.3 PERCENT) NON-AFFECTED AREA RESIDENTS SUBMITTING COMMENTS SUPPORTED THE PREFERRED ALTERNATIVE. A MINORITY OF THE RESIDENTS LIVING WITHIN THE AFFECTED AREA, AND--TO A LESSER DEGREE--IN THE SURROUNDING COMMUNITY, EITHER OPPOSED THE PREFERRED REMEDY OR SUPPORTED OTHER ALTERNATIVES. OF THE 57 AFFECTED AREA COMMENTORS, 16 (28.1 PERCENT) OPPOSED THE PREFERRED ALTERNATIVE OR SUPPORTED ONE OF THE OTHER ALTERNATIVES AND THREE (5.2 PERCENT) DID NOT INDICATE A PREFERENCE. OF THE 46 NON-AFFECTED AREA COMMENTORS, SEVEN (15.2 PERCENT) OPPOSED THE PREFERRED ALTERNATIVE OR SUPPORTED ANOTHER ALTERNATIVE. THREE (6.5 PERCENT) DID NOT INDICATE A PREFERENCE. TABLE 1 PROVIDES AN OVERVIEW OF ORAL AND WRITTEN COMMENTS RECEIVED BY US EPA.

THESE SECTIONS TO FOLLOW:

- \* BACKGROUND ON COMMUNITY INVOLVEMENT;
- \* SUMMARY OF COMMENTS RECEIVED DURING THE PUBLIC COMMENT PERIOD AND AGENCY RESPONSES;
- \* REMAINING CONCERNS; AND
- \* ATTACHMENT: COMMUNITY RELATIONS ACTIVITIES AT NPI.

BACKGROUND ON COMMUNITY INVOLVEMENT

SIGNIFICANT COMMUNITY INTEREST IN THE SITE DATES TO 1985 WHEN WDNR INITIATED A GROUNDWATER CONTAMINATION INVESTIGATION AT AND NEAR THE SITE. IN 1986, WDNR REPORTED THAT SIGNIFICANT CONCENTRATIONS OF CONTAMINANTS WERE FOUND IN DRINKING WATER WELLS IN AN AREA NORTH AND EAST OF THE SITE. COMMUNITY CONCERN AND INVOLVEMENT HAVE REMAINED STRONG SINCE THEN. THERE HAS BEEN CONSIDERABLE MEDIA ATTENTION ABOUT THE SITE, AS WELL AS PUBLIC CONCERN REGARDING GROUNDWATER CONTAMINATION. THERE HAVE ALSO BEEN LEGAL AND POLITICAL DISPUTES INVOLVING THE TOWN OF HALLIE AND CITY OF EAU CLAIRE OVER ANNEXATIONS OF PORTIONS OF THE AFFECTED AREA THAT WERE PREVIOUSLY UNDER THE JURISDICTION OF THE TOWN OF HALLIE.

THE MAJOR CONCERNS EXPRESSED BY CITIZENS OF HALLIE DURING THE REMEDIAL PLANNING ACTIVITIES FOCUSED ON DECREASING PROPERTY VALUES; THE SCOPE OF RESIDENTIAL WELL SAMPLING; OVERSIGHT OF THE REMEDIAL INVESTIGATION (RI); AND THE AVAILABILITY AND FUNDING OF AN ACCEPTABLE ALTERNATE WATER SUPPLY. THESE CONCERNS AND HOW US EPA ADDRESSED THEM ARE DESCRIBED BELOW:

COMMENT: MANY RESIDENTS OF THE AFFECTED AREA EXPRESSED CONCERN THAT INSUFFICIENT INFORMATION AND EXCESSIVE MEDIA COVERAGE HAD, IN PART, RESULTED IN A DECLINE IN PROPERTY VALUES WITHIN THE AFFECTED AREA.

US EPA RESPONSE: US EPA IS UNABLE TO DIRECTLY ADDRESS CONCERNS WITH DECLINING PROPERTY VALUES. HOWEVER, THE AGENCY ADDRESSED THE ONE KEY CAUSE OF DECLINING PROPERTY VALUES--DRINKING WATER SUPPLY CONTAMINATION. US EPA ISSUED A UNILATERAL ORDER TO NPI IN APRIL 1989 REQUIRING NPI TO DISTRIBUTE BOTTLED WATER TO RESIDENCES AND BUSINESSES IN THE AFFECTED AREA. THE UNILATERAL ORDER ALSO REQUIRED NPI TO COMPLETE A PHASED FEASIBILITY STUDY (PFS) TO EVALUATE METHODS TO PROVIDE A PERMANENT AND SAFE DRINKING WATER SUPPLY TO THE AFFECTED AREA. FURTHERMORE, US EPA PROVIDED THE COMMUNITY WITH ACCURATE, UP-TO-DATE INFORMATION ABOUT THE REMEDIAL INVESTIGATION AND FEASIBILITY STUDY (RI/FS), PFS, AND POSSIBLE HEALTH EFFECTS CAUSED BY THE GROUNDWATER CONTAMINATION. THE ROD DETAILS US EPA'S SELECTED ALTERNATIVE FOR A REPLACEMENT DRINKING WATER SUPPLY FOR THE AFFECTED AREA AND BELIEVES THE FINAL REMEDY WILL HAVE A POSITIVE IMPACT ON PROPERTY VALUES.

COMMENT: LOCAL RESIDENTS AND ELECTED OFFICIALS EXPRESSED CONCERN ABOUT THE SCOPE OF THE PRIVATE WELL SAMPLING AND ITS ABILITY TO FULLY DEFINE THE AREA OF CONTAMINATION.

US EPA RESPONSE: US EPA BELIEVES IT HAS SUFFICIENTLY DEFINED THE AREA OF CONTAMINATION BASED ON EXTENSIVE PRIVATE WELL SAMPLING IN CONJUNCTION WITH GROUNDWATER ELEVATION DATA USED TO DETERMINE THE DIRECTION OF GROUNDWATER MOVEMENT. WHERE APPROPRIATE, WELLS OUTSIDE THE EXPECTED LIMITS OF CONTAMINATION WERE SAMPLED TO CONFIRM THAT THEY WERE FREE OF CONTAMINATION. THE FINAL BOUNDARIES OF THE AFFECTED AREA INCLUDE A MARGIN OF SAFETY TO ACCOUNT FOR POTENTIAL FUTURE MOVEMENT OF CONTAMINATION BEYOND ITS CURRENT LIMITS. THE FINAL REMEDY INCLUDES SAMPLING OF PRIVATE WELLS ALONG THE BOUNDARY OF THE AFFECTED AREA TO MONITOR ANY UNEXPECTED MOVEMENT OR SHIFTING OF THE CONTAMINATION PLUME.

COMMENT: CONCERN WAS EXPRESSED REGARDING US EPA OVERSIGHT OF NPI DURING THE RI.

US EPA RESPONSE: IN FACT SHEETS AND AT PUBLIC MEETINGS, US EPA INFORMED THE COMMUNITY OF AGENCY OVERSIGHT RESPONSIBILITY AT SUPERFUND SITES WHERE PRPS HAVE UNDERTAKEN THE RI/FS TO ENSURE THAT IT IS CONDUCTED IN ACCORDANCE WITH THE SUPERFUND LAW, US EPA POLICY AND GUIDANCE, AND THE APPROVED WORK PLAN FOR THE INVESTIGATION. US EPA IS REQUIRED BY THE SUPERFUND LAW TO OVERSEE THE RI TO THE EXTENT NECESSARY TO SATISFY THESE REQUIREMENTS.

COMMENT: SEVERAL TOWN OF HALLIE OFFICIALS AND RESIDENTS EXPRESSED CONCERN THAT THE NEED FOR A PERMANENT WATER SUPPLY WOULD RESULT IN AN UNWANTED ANNEXATION INTO THE CITY OF EAU CLAIRE.

US EPA RESPONSE: US EPA BELIEVES THE SELECTED REMEDY SATISFIES THIS CONCERN. ANNEXATION IS A PERSONAL CHOICE AND THE SELECTED REMEDY IS AN ANNEXATION-NEUTRAL APPROACH THAT ACCOMMODATES THE PREFERENCES OF BUSINESSES AND RESIDENCES IN THE AFFECTED AREA. US EPA EMPHASIZED THE IMPORTANCE OF COMMUNITY INPUT INTO THE REMEDY SELECTION PROCESS. THROUGH A FACT SHEET, COPIES OF THE PFS AND PROPOSED PLAN IN LOCAL REPOSITORIES, A PRESS RELEASE, AN ADVERTISEMENT IN TWO LOCAL NEWSPAPERS, AND A PUBLIC MEETING, RESIDENTS WERE GIVEN INFORMATION BY THE AGENCY CONCERNING ALL ALTERNATIVES CONSIDERED.

RESIDENTS WERE ENCOURAGED TO SUBMIT COMMENTS WHICH WOULD BE CONSIDERED BEFORE A FINAL REMEDY WAS SELECTED. TO FACILITATE WRITTEN COMMENTS, A SPECIAL INSERT WAS INCLUDED IN THE FACT SHEET AND DISTRIBUTED AT THE

PUBLIC MEETING. THE INSERT EXPLAINED THE PURPOSE OF THE PUBLIC COMMENT PERIOD AND ENCOURAGED RESIDENTS TO SUBMIT COMMENTS. THE INSERT PROVIDED SPACE FOR A WRITTEN COMMENT AND WAS DESIGNED TO BE A "SELF-MAILER." FINALLY, THE AGENCY PROVIDED RESIDENTS WITH A 45-DAY COMMENT PERIOD, WHICH WAS LATER EXTENDED TO 60 DAYS IN ORDER TO ACCOMMODATE THE PSC HEARING AND ALLOW RESIDENTS AMPLE OPPORTUNITY FOR COMMENT. A FINAL REMEDY WAS NOT SELECTED UNTIL THE PUBLIC COMMENT PERIOD ENDED AND AFTER THE JUNE 13, 1990 DECISION BY THE PSC.

#### SUMMARY OF COMMENTS RECEIVED DURING THE PUBLIC COMMENT PERIOD

COMMENTS RECEIVED DURING THE PUBLIC COMMENT PERIOD ON THE PFS AND PROPOSED PLAN FOR A PERMANENT DRINKING WATER SUPPLY FOR THE AFFECTED AREA ALONG WITH US EPA'S RESPONSES ARE SUMMARIZED BELOW. THE COMMENT PERIOD WAS HELD FROM JANUARY 4 THROUGH MARCH 5, 1990. COMMENTS AND RESPONSES HAVE BEEN DIVIDED INTO THREE SECTIONS AND ARE FURTHER CATEGORIZED BY TOPIC WITHIN EACH SECTION. THE THREE SECTIONS ARE AS FOLLOWS.

1. SUMMARY OF COMMENTS FROM THE LOCAL COMMUNITY INCLUDING WRITTEN AND ORAL COMMENTS SUBMITTED DURING THE FEBRUARY 19, 1990 PSC HEARING AT THE HALLIE TOWN HALL;
2. SUMMARY OF COMMENTS FROM ONE PRP (NPI), THE CITIES OF EAU CLAIRE AND CHIPPEWA FALLS, AND THE TOWN OF HALLIE; AND
3. SUMMARY OF COMMENTS FROM EDER ASSOCIATES, INC. AND SHORT ELLIOT HENDRICKSON, CONSULTANTS FOR NPI AND THE TOWN OF HALLIE, RESPECTIVELY.

SOME OF THE COMMENTS BELOW HAVE BEEN PARAPHRASED IN ORDER TO EFFECTIVELY SUMMARIZE THEM IN THIS DOCUMENT. THE READER IS REFERRED TO THE PUBLIC MEETING TRANSCRIPT AND WRITTEN COMMENTS WHICH ARE AVAILABLE FOR REVIEW AT THE PUBLIC INFORMATION REPOSITORIES.

UNDER A MARCH 1, 1990 COVER LETTER TO US EPA, THE CITY OF EAU CLAIRE SUBMITTED CORRESPONDENCE BETWEEN THE CITY AND US EPA, AND TWO BOUND VOLUMES OF TESTIMONY AND EXHIBITS AS ITS COMMENTS FOR INCLUSION IN THE ADMINISTRATIVE RECORD FOR THE SITE. VOLUME I CONSISTS OF SWORN TESTIMONY BY EAU CLAIRE WITNESSES BEFORE THE FEBRUARY 19, 1990 PSC HEARING. VOLUME II CONTAINS EXHIBITS TO EACH WITNESS IDENTIFIED IN VOLUME I. EXHIBITS INCLUDE CORRESPONDENCE BETWEEN THE CITY OF EAU CLAIRE AND OTHER INTERESTED PARTIES, MAPS, EXCERPTS AND COPIES OF LOCAL AND REGIONAL PLANNING DOCUMENTS, COST ESTIMATES AND COMPARISONS, PHOTOS AND OTHER INFORMATION DEEMED APPROPRIATE BY THE CITY OF EAU CLAIRE FOR THE PSC'S RECORD. ONE OF THE LETTERS, DATED JANUARY 29, 1990, CONTAINS EAU CLAIRE'S PROPOSAL TO EXTEND RETAIL WATER SERVICE TO THE ENTIRE AFFECTED AREA WITHOUT REQUIRING ANNEXATION. THE LETTER ALSO PRESENTS THE CITY'S CONCLUSIONS AFTER ITS REVIEW OF THE PFS AND PROPOSED PLAN. AFTER A THOROUGH REVIEW OF THE CITY'S SUBMITTAL, US EPA INCORPORATED THE CITY'S SIGNIFICANT COMMENTS INTO THIS RESPONSIVENESS SUMMARY. ALTHOUGH THE CITY OF CHIPPEWA FALLS, THE TOWN OF HALLIE AND NPI DID NOT SUBMIT A COMPARABLE VOLUME OF COMMENTS, THE SAME APPROACH WAS APPLIED TO THESE COMMENTS.

#### RESPONSES TO COMMENTS FROM RESIDENCES AND BUSINESSES IN THE AFFECTED AREA

##### SUPPORT FOR AN INDEPENDENT HALLIE SANITARY DISTRICT

COMMENT: SEVERAL RESIDENTS AND STATE SENATOR MARVIN J. ROSHELL EXPRESSED SUPPORT FOR THE PREFERRED REMEDY BECAUSE IT PROVIDES AN INDEPENDENT, TOWNSHIP-CONTROLLED WATER SYSTEM. ONE RESIDENT COMMENTED THAT ALTERNATIVE 2 ALLOWS THE TOWN OF HALLIE TO SOLVE ITS OWN PROBLEMS. SEVERAL RESIDENTS COMMENTED THAT THEY WOULD RATHER PAY FOR A TOWN OF HALLIE WATER SYSTEM, EVEN IF THE COST WERE ULTIMATELY GREATER THAN SERVICE FROM THE CITY OF EAU CLAIRE.

US EPA RESPONSE: US EPA WANTS TO IMPLEMENT THE BEST REMEDY FOR THE SITE. SEVERAL FACTORS ARE TAKEN INTO CONSIDERATION WHEN SELECTING A CLEANUP ALTERNATIVE, SUCH AS: PROTECTION OF HUMAN HEALTH AND THE ENVIRONMENT; EFFECTIVENESS; REDUCTION IN TOXICITY, MOBILITY, OR VOLUME OF CONTAMINANTS; IMPLEMENTABILITY; COMPLIANCE WITH FEDERAL, STATE, AND LOCAL ENVIRONMENTAL LAWS AND REGULATIONS; COST; AND ACCEPTANCE BY THE COMMUNITY AND THE STATE. THE SELECTED REMEDY PROVIDES THE BEST BALANCE AMONG THESE CRITERIA WITH PARTICULAR EMPHASIS ON COMMUNITY ACCEPTANCE AND IMPLEMENTABILITY. THE DUAL SYSTEM IS DESIGNED TO ACCOMMODATE THE DISTRICT AS AUTHORIZED BY THE PSC, AND THOSE BUSINESSES AND RESIDENCES WHO CHOSE TO ANNEX TO EAU CLAIRE. FURTHERMORE, IT IS VIEWED BY US EPA AND WDNR AS THE ONLY IMPLEMENTABLE ALTERNATIVE.

COMMENT: TWO RESIDENTS SUPPORTED ALTERNATIVE 2 AS THE BEST SOLUTION BECAUSE THOSE WHO HAD ANNEXED TO THE CITY OF EAU CLAIRE WOULD RECEIVE SERVICES FROM THAT CITY, WHILE RESIDENTS OF HALLIE WOULD BE SERVED BY THE DISTRICT.

US EPA RESPONSE: US EPA AGREES THAT THE REMEDY SELECTED WOULD AVOID PROBLEMS WHICH MAY BE ASSOCIATED WITH LOCAL UNITS OF GOVERNMENT PROVIDING SERVICE TO PROPERTY BEYOND THEIR CORPORATE BOUNDARIES. THIS WAS ONE IMPORTANT FACTOR IN THE SELECTION OF THE PREFERRED AND FINAL REMEDIES.

COMMENT: ONE COMMENTOR DID NOT SUPPORT ALTERNATIVE 2 BECAUSE THEY BELIEVED THAT TOWN OF HALLIE OFFICIALS WERE MORE INTERESTED IN MAINTAINING HALLIE'S INTEGRITY AS A TOWN RATHER THAN PROVIDING RESIDENTS OF THE AFFECTED AREA WITH A CLEAN SOURCE OF DRINKING WATER.

US EPA RESPONSE: THE PURPOSE OF THE PFS WAS TO EVALUATE ALTERNATIVES FOR A PERMANENT DRINKING WATER SUPPLY THAT IS IMPLEMENTABLE AND PROTECTS HUMAN HEALTH. ALTERNATIVE 2, AND EACH OF THE OTHER ALTERNATIVES CONSIDERED, ONLY ADDRESSED PROVIDING A PERMANENT WATER SUPPLY FOR THE AFFECTED AREA. THE PLANS AND POLICIES OF THE TOWN OF HALLIE AND THE DISTRICT FOR SERVICING CUSTOMERS BEYOND THE AFFECTED AREA WERE NOT A FACTOR IN SELECTING THE FINAL REMEDY.

COMMENT: MANY RESIDENTS OF THE AFFECTED AREA AND THE SURROUNDING AREAS OF THE TOWN OF HALLIE SPECIFICALLY OPPOSED ALTERNATIVE 3, AS PRESENTED IN THE PFS AND THE PROPOSED PLAN, BECAUSE OF OPPOSITION TO ANNEXATION TO THE CITY OF EAU CLAIRE.

US EPA RESPONSE: US EPA AGREES WITH THE COMMENTORS' CONCERNS. THE EVALUATION OF ALTERNATIVE 3 DID CONSIDER THAT ANNEXATION WAS A PREREQUISITE TO THE IMPLEMENTATION OF THIS ALTERNATIVE WHICH IS NOT ACCEPTABLE TO THE MAJORITY OF THE COMMUNITY. DURING THE PUBLIC COMMENT PERIOD, EAU CLAIRE DID OFFER TO PROVIDE WATER TO THE AFFECTED AREA WITHOUT REQUIRING ANNEXATION. AS A VIABLE ALTERNATIVE, US EPA WAS OBLIGATED TO EVALUATE IT IN A MANNER CONSISTENT WITH OTHER POTENTIAL ALTERNATIVES. THE IDENTIFICATION OF ALTERNATIVE 2 AS THE PREFERRED REMEDY AND AS THE FINAL REMEDY REFLECTS, IN PART, US EPA'S SENSITIVITY TO THE PREFERENCE OF RESIDENTS IN THE AFFECTED AREA FOR AN ALTERNATIVE WHICH WAS INDEPENDENT FROM THE CITY OF EAU CLAIRE, WITH OR WITHOUT ANNEXATION. FURTHERMORE, THE PSC DECISION RENDERED ALTERNATIVE 2 AS THE ONLY IMPLEMENTABLE ALTERNATIVE.

#### PROPERTY VALUES

COMMENT: ALTERNATIVE 2 WAS SUPPORTED BY SOME RESIDENTS AS THEY BELIEVED IT WOULD HELP RESTORE PROPERTY VALUES WHICH HAD BEEN ADVERSELY AFFECTED BY GROUNDWATER CONTAMINATION. OTHER COMMENTORS OPPOSED ALTERNATIVES 1, 4, AND 5, AS PRESENTED IN THE PFS AND THE PROPOSED PLAN, BECAUSE THEY BELIEVED THESE ALTERNATIVES WOULD NOT HAVE A BENEFICIAL EFFECT ON PROPERTY VALUES.

US EPA RESPONSE: US EPA'S GOAL FOR THIS REMEDIAL ACTION IS TO IMPLEMENT A REMEDY WHICH PROTECTS HUMAN HEALTH. THIS ACTION PERTAINS ONLY TO PROVIDING A PERMANENT WATER SUPPLY FOR THE AREA AFFECTED BY GROUNDWATER CONTAMINATION. PROPERTY VALUES WERE NOT A FACTOR IN SELECTING THE FINAL REMEDY, ALTHOUGH IT IS US EPA'S BELIEF THAT A PERMANENT AND SAFE WATER SUPPLY WILL HELP RESTORE DEPRESSED PROPERTY VALUES.

#### SPEED OF IMPLEMENTATION

COMMENT: TWO RESIDENTS COMMENTED THAT THEY PREFERRED ALTERNATIVE 2 BECAUSE IT COULD BE IMPLEMENTED FASTER THAN THE OTHER ALTERNATIVES. ONE CONTENDED THAT THE TOWN OF HALLIE HAS ALREADY COMPLETED GROUND WORK TO IMPLEMENT THE ALTERNATIVE AND THEREFORE, THE ALTERNATIVE COULD BE SPEEDILY IMPLEMENTED. ANOTHER COMMENTOR BELIEVED THAT ALTERNATIVE 6, AS PRESENTED IN THE PFS AND THE PROPOSED PLAN, SHOULD NOT BE ADOPTED BY US EPA AS THE FINAL REMEDY BECAUSE IT WOULD RESULT IN SLOWING DOWN THE IMPLEMENTATION OF THE HALLIE SANITARY DISTRICT SYSTEM. SEVERAL RESIDENTS RECOMMENDED ALTERNATIVE 3 BECAUSE IT WOULD PROVIDE THE FASTEST WAY TO SOLVE THE PROBLEM.

US EPA RESPONSE: SHORT-TERM EFFECTIVENESS IS ONE CRITERIA USED BY THE AGENCY TO EVALUATE REMEDIAL ALTERNATIVES. IN THE PROPOSED PLAN, US EPA ESTIMATED THAT ALTERNATIVE 4 WOULD REQUIRE THE LEAST TIME TO IMPLEMENT. HOWEVER, THE TIME REQUIRED TO IMPLEMENT AN ALTERNATIVE IS ONLY ONE FACTOR CONSIDERED IN THE SELECTION PROCESS. THE SELECTED REMEDY WOULD NEITHER BE THE SHORTEST NOR THE MOST TIME-CONSUMING ALTERNATIVE

TO IMPLEMENT. US EPA DOES BELIEVE THAT THE SELECTED REMEDY IS THE ONLY ALTERNATIVE THAT CAN BE IMPLEMENTED IN A TIMELY MANNER AND IT PROVIDES THE BEST BALANCE AMONG ALL THE CRITERIA USED FOR EVALUATION.

#### PROTECTION OF HUMAN HEALTH

COMMENT: A NUMBER OF RESIDENTS RECOMMENDED THE SELECTION OF ALTERNATIVE 2 AS THE FINAL REMEDY BECAUSE IT WOULD ELIMINATE POTENTIAL HEALTH RISKS ASSOCIATED WITH INGESTION OF CONTAMINATED GROUNDWATER.

US EPA RESPONSE: US EPA AGREES WITH THE COMMENTORS; HOWEVER, THROUGH PROPER MAINTENANCE AND MONITORING, A NUMBER OF THE REMEDIAL ALTERNATIVES PRESENTED IN THE PROPOSED PLAN WOULD PROTECT HUMAN HEALTH. ALTERNATIVES 2, 3 AND 6 WOULD ACHIEVE THE SAME REMEDIAL ACTION GOALS OF PREVENTING EXPOSURE TO CONTAMINANTS IN THE GROUNDWATER, WITHOUT THE EXTENSIVE MONITORING AND MAINTENANCE REQUIRED FOR ALTERNATIVES 4 AND 5. ADDITIONALLY, ALTERNATIVES 4 AND 5 DO NOT MEET THE REMEDIAL OBJECTIVES OF LONG-TERM EFFECTIVENESS AND PERMANENCE. ALTERNATIVES 3 AND 6 ARE UNIMPLEMENTABLE BECAUSE OF PRECONDITIONS THAT HAVE TO BE SATISFIED. THIS LEAVES ALTERNATIVE 2 AS THE ONLY IMPLEMENTABLE ALTERNATIVE THAT SATISFIES THE REMEDIAL OBJECTIVES.

COMMENT: SEVERAL RESIDENTS EXPRESSED CONCERN OVER THE PRESENCE OF VOLATILE ORGANIC COMPOUNDS (VOCs) IN THE CITY OF EAU CLAIRE WATER SUPPLY AND THE POTENTIAL EFFECTS ON HUMAN HEALTH. SIMILAR CONCERNS WERE EXPRESSED FOR ALTERNATIVE 4 IF THE TREATMENT UNITS WERE NOT PROPERLY MAINTAINED AND FOR ALTERNATIVE 1, THE NO ACTION ALTERNATIVE.

US EPA RESPONSE: US EPA HAS CONSIDERED THE ADVANTAGES, DISADVANTAGES, AND UNCERTAINTIES ASSOCIATED WITH EACH ALTERNATIVE EVALUATED IN THE PFS. ALTERNATIVES 2, 3 AND 6 WOULD ELIMINATE CONTACT WITH AND CONSUMPTION OF CONTAMINATED GROUNDWATER. EACH WOULD PROVIDE SAFEGUARDS TO ENSURE DRINKING WATER QUALITY. CONTAMINATED GROUNDWATER AT THE EAU CLAIRE WELL FIELD IS TREATED AND CONTINUOUSLY MONITORED TO ENSURE THAT IT COMPLIES WITH FEDERAL AND STATE DRINKING WATER STANDARDS. US EPA RECOGNIZES THAT THE ABILITY OF ALTERNATIVE 4 TO EFFECTIVELY ELIMINATE EXPOSURE TO CONTAMINANTS IN GROUNDWATER IS DEPENDENT ON PERIODIC MONITORING AND REQUIRED MAINTENANCE OVER A LONG PERIOD OF TIME. THE SUPERFUND LAW REQUIRES US EPA TO CONSIDER THE NO ACTION ALTERNATIVE (ALTERNATIVE 1) AS A BASIS FOR COMPARISON WITH OTHER REMEDIAL ALTERNATIVES. THE NO ACTION ALTERNATIVE WAS NOT SELECTED FOR THIS SITE BECAUSE IT WOULD NOT PROTECT HUMAN HEALTH, WOULD NOT COMPLY WITH FEDERAL AND STATE REGULATIONS AND WOULD NOT BE EFFECTIVE IN ADDRESSING SITE CONDITIONS. AFTER CONSIDERING THE TRADEOFFS BETWEEN EACH ALTERNATIVE, US EPA DECIDED ON THE REMEDY DESCRIBED IN THE ROD.

COMMENT: ONE COMMENTOR OPPOSED ALTERNATIVE 4 BECAUSE IT WOULD REQUIRE HOMEOWNER MAINTENANCE, WHICH COULD RESULT IN THE INDIVIDUAL HOME TREATMENT UNIT NOT PROVIDING THE LEVEL OF PROTECTION INTENDED.

US EPA RESPONSE: US EPA AGREES THAT INDIVIDUAL HOME AND BUSINESS TREATMENT UNITS WOULD REQUIRE MONITORING AND MAINTENANCE BY QUALIFIED PERSONNEL TO ENSURE THAT DRINKING WATER QUALITY MEETS FEDERAL AND STATE STANDARDS. THE NEED FOR LONG-TERM MONITORING AND MAINTENANCE WAS CONSIDERED WHEN THIS ALTERNATIVE WAS EVALUATED. US EPA DETERMINED THAT ALTERNATIVE 4 DID NOT PROVIDE THE BEST BALANCE AMONG THE CRITERIA USED TO EVALUATE CLEAN UP ALTERNATIVES.

#### BETTERMENT

COMMENT: SEVERAL COMMENTORS FAVORED ALTERNATIVE 3 BECAUSE IF THE AREA WERE TO BE ANNEXED TO EAU CLAIRE, SEWER SERVICE WOULD BECOME AVAILABLE. IN FACT, ONE RESIDENT FAVORED ALTERNATIVE 3 ONLY IF WATER AND SEWER SERVICE IS EXTENDED TO THE ANNEXED AREA.

US EPA RESPONSE: SUPERFUND REMEDIES ONLY ADDRESS THE PROBLEMS CAUSED BY THE SITE. ANY REMEDIAL ACTION BEYOND WHAT IS NECESSARY TO ADDRESS CONTAMINATION ATTRIBUTABLE TO THE SITE IS CONSIDERED A BETTERMENT. IN THIS CASE, THE PROVISION OF SEWER SERVICES AS A PART OF THE SELECTED REMEDIAL ACTION IS BEYOND THE SCOPE OF THE SUPERFUND PROGRAM. THE EVALUATION OF ALTERNATIVE 2, AND EACH OF THE OTHER ALTERNATIVES CONSIDERED, ONLY ADDRESSED PROVIDING A PERMANENT WATER SUPPLY FOR THE AFFECTED AREA. THE SELECTED REMEDY WILL PROVIDE A PERMANENT AND SAFE DRINKING WATER SUPPLY TO THE AFFECTED AREA THAT COMPLIES WITH STATE AND LOCAL CODES GOVERNING COMMUNITY WATER SYSTEMS, INCLUDING FIRE PROTECTION.

#### IMPLEMENTABILITY

COMMENT: A NUMBER OF COMMENTORS OPPOSED ALTERNATIVE 2 BECAUSE THEY DID NOT BELIEVE THAT THE DISTRICT WAS VIABLE.

US EPA RESPONSE: THE VIABILITY OF THE DISTRICT IS AN ISSUE WHICH IS ADDRESSED BY APPROPRIATE AGENCIES IN THE STATE OF WISCONSIN. THE DISTRICT IS THE UNIT OF LOCAL GOVERNMENT AUTHORIZED BY THE PSC TO PROVIDE DRINKING WATER TO THAT PORTION OF THE AFFECTED AREA WITHIN THE DISTRICT'S BOUNDARIES.

COMMENT: ONE RESIDENT COMMENTED THAT WITHOUT THE SUPPORT OF THE TOWN OF HALLIE, THE CITY OF EAU CLAIRE WOULD NOT HAVE THE AUTHORITY TO IMPLEMENT SERVICE TO RESIDENCES IN THE TOWN OF HALLIE.

US EPA RESPONSE: US EPA SERIOUSLY CONSIDERED THE ABILITY OF ALTERNATIVE 6 TO BE IMPLEMENTED WITHOUT COOPERATION FROM THE TOWN OF HALLIE. US EPA DETERMINED THAT WITHOUT COOPERATION FROM THE TOWN OF HALLIE, ALTERNATIVE 6 MAY NOT BE IMPLEMENTABLE. PRESENTLY, THE TOWN OF HALLIE HAS INDICATED THAT IT WOULD NOT SUPPORT WATER SERVICE FROM THE CITY OF EAU CLAIRE TO RESIDENTS OF THE TOWN OF HALLIE LIVING IN THE AFFECTED AREA, EVEN IF ANNEXATION IS NOT REQUIRED BY EAU CLAIRE. LACK OF SUPPORT BY THE TOWN OF HALLIE MAY RESULT IN THIS ALTERNATIVE BEING UNIMPLEMENTABLE. HOWEVER, THIS IS NO LONGER AN ISSUE BECAUSE IN THE ABSENCE OF PSC APPROVAL, EAU CLAIRE DOES NOT HAVE THE AUTHORITY TO SERVICE THOSE PORTIONS OF THE AFFECTED AREA OUTSIDE ITS MUNICIPAL BOUNDARY AND IN THE TOWN OF HALLIE.

COMMENT: ONE RESIDENT CONTENDED THAT THE INCORPORATION OF THE DISTRICT WOULD PREVENT ANY OTHER UNIT OF GOVERNMENT FROM PROVIDING SERVICE WITHIN THE JURISDICTION OF THE DISTRICT.

US EPA RESPONSE: MORE IMPORTANT THAN THE CREATION OF THE DISTRICT WAS THE PSC ORDER WHICH GRANTED THE DISTRICT THE AUTHORITY TO PROVIDE DRINKING WATER TO THOSE AREAS WITHIN DISTRICT BOUNDARIES. IF THE CITY OF EAU CLAIRE AND THE DISTRICT DISPUTE THE AUTHORITY TO SERVICE PORTIONS OF THE AFFECTED AREA THAT HAVE ANNEXED TO OR PETITIONED FOR ANNEXATION TO EAU CLAIRE, THE DECISION MAY ULTIMATELY BE DECIDED THROUGH LITIGATION BETWEEN EAU CLAIRE AND THE DISTRICT.

COMMENT: ONE RESIDENT OF THE AFFECTED AREA REQUESTED A VARIANCE TO PERMIT CONTINUED USE OF HIS WELL FOR NON-POTABLE PURPOSES.

US EPA RESPONSE: THE GRANTING OF VARIANCES IS THE RESPONSIBILITY OF THE STATE OF WISCONSIN. LOCAL CODES MAY ALSO REGULATE THE FUTURE USE OF PRIVATE WELLS.

COMMENT: ONE COMMENTOR QUESTIONED WHETHER PROPOSED CHANGES TO SOME STATE OF WISCONSIN GROUNDWATER ENFORCEMENT STANDARDS WOULD IMPACT THE FINAL REMEDY.

US EPA RESPONSE: US EPA HAS EVALUATED THE POTENTIAL RISKS TO HUMAN HEALTH UNDER THE NO ACTION ALTERNATIVE WHICH ASSUMES CONTINUED CONSUMPTION OF CONTAMINATED GROUNDWATER. POTENTIAL HEALTH RISKS WERE DETERMINED FOR THE GROUNDWATER INGESTION PATHWAY. EVEN IF STATE ENFORCEMENT STANDARDS DO CHANGE, THE RISK ASSESSMENT IS BASIS ENOUGH TO JUSTIFY A REMEDIAL ACTION THAT IS PROTECTIVE OF HUMAN HEALTH, IN THIS CASE A REPLACEMENT WATER SUPPLY FOR THE AFFECTED AREA. IF THE PROPOSED STANDARDS ARE ADOPTED BY THE STATE LEGISLATURE, A SIGNIFICANT NUMBER OF WELLS WILL STILL BE CONTAMINATED AT LEVELS ABOVE THE STATE'S PREVENTIVE ACTION LIMITS AND A LESSER NUMBER WILL EXCEED THE ENFORCEMENT STANDARDS.

#### COST

COMMENT: A NUMBER OF COMMENTORS SUPPORTED ALTERNATIVE 3 BECAUSE IT COULD PROVIDE DRINKING WATER TO THE AFFECTED AREA AT LESS COST TO RESIDENTS THAN OTHER ALTERNATIVES. TWO COMMENTORS INDICATED THAT THEY SUPPORTED ALTERNATIVE 4 BECAUSE IT WAS THE LEAST EXPENSIVE ALTERNATIVE TO IMPLEMENT.

US EPA RESPONSE: THE COST TO RESIDENTS OF PROVIDING SERVICE TO THE AFFECTED AREA (ANNUAL OPERATION AND MAINTENANCE COSTS) WAS NOT A FACTOR IN SELECTING THE FINAL REMEDY BECAUSE THE OPERATION AND MAINTENANCE COSTS WILL BE THE RESPONSIBILITY OF CUSTOMERS THROUGH USER FEES. US EPA IS AWARE OF THE FACT THAT SERVICE CAN BE PROVIDED AT A LOWER COST TO THE CUSTOMER UNDER EITHER ALTERNATIVE 3 OR 6. THIS INFORMATION WAS PROVIDED TO THE COMMUNITY DURING THE PUBLIC COMMENT PERIOD AND YET SUPPORT FOR THE DISTRICT REMAINED HIGH. ALTERNATIVE 3 REQUIRES ANNEXATION OF THE ENTIRE AFFECTED AREA PRIOR TO IMPLEMENTATION. ALTERNATIVE 6 IS NOT

IMPLEMENTABLE BECAUSE THE PSC ORDER AUTHORIZES THE DISTRICT TO SERVICE THOSE PORTIONS OF THE AFFECTED AREA UNDER ITS JURISDICTION. FOR ALTERNATIVE 4, LOWER IMPLEMENTATION COSTS ARE OFFSET BY THE HIGH OPERATION AND MAINTENANCE COSTS TO GUARANTEE CONTINUED EFFECTIVENESS OF THE TREATMENT UNITS. FURTHERMORE, ALTERNATIVE 4 DOES NOT SATISFY THE DEGREE OF PERMANENCE REQUIRED FOR THE FINAL REMEDY. GIVEN THE ABOVE CONDITIONS, US EPA AND WDNR BELIEVE THE SELECTED REMEDY IS THE ONLY IMPLEMENTABLE ALTERNATIVE.

COMMENT: ONE RESIDENT COMMENTED THAT THE WATER SUPPLY AVAILABLE TO THE CITY OF EAU CLAIRE MAY NOT BE SUFFICIENT TO SUPPLY WATER TO THE AFFECTED AREA OF THE TOWN OF HALLIE WITHOUT CAPITAL CONSTRUCTION. HOWEVER, SUCH COSTS WERE NOT INCLUDED IN THE COST ESTIMATES FOR THIS ALTERNATIVE.

US EPA RESPONSE: BASED ON THE INFORMATION PROVIDED BY THE CITY OF EAU CLAIRE, A SUFFICIENT SUPPLY OF WATER IS AVAILABLE THROUGH ITS WATER SYSTEM TO SUPPLY WATER TO THE AFFECTED AREA. NO UPGRADES OF THE EAU CLAIRE WATER SYSTEM ARE REQUIRED. THEREFORE, THE CAPITAL COSTS ESTIMATE FOR ALTERNATIVE 3 PRESENTED IN THE PFS INCLUDED CONSTRUCTION COSTS RELATED TO THE EXTENSION OF WATER TO EACH RESIDENCE IN THE AFFECTED AREA.

COMMENT: ONE COMMENTOR OPPOSED ALTERNATIVE 4 BECAUSE IT WOULD BE THE MOST EXPENSIVE ALTERNATIVE TO OPERATE AND MAINTAIN OVER THE LONG TERM.

US EPA RESPONSE: US EPA AGREES WITH THE COMMENTOR'S STATEMENT AND IDENTIFIED IT AS ONE OF THE REASONS FOR ELIMINATING ALTERNATIVE 4 FROM FURTHER CONSIDERATION. OF GREATER SIGNIFICANCE IS THE INABILITY OF ALTERNATIVE 4 TO MEET THE REMEDIAL OBJECTIVE OF LONG-TERM EFFECTIVENESS AND PERMANENCE.

COMMENT: TWO COMMENTORS FAVORED ALTERNATIVE 3 BECAUSE IT WOULD NOT RESULT IN THE DUPLICATION OF SERVICES BETWEEN THE DISTRICT AND THE CITY OF EAU CLAIRE.

US EPA RESPONSE: DUPLICATION OF SERVICE WAS ONE FACTOR CONSIDERED IN THE EVALUATION OF THE COST AND IMPLEMENTABILITY OF THE PREFERRED REMEDY. US EPA AGREES WITH THE COMMENTORS' STATEMENT THAT ALTERNATIVE 3 WOULD NOT REQUIRE DUPLICATION OF SERVICES; HOWEVER, BEFORE ALTERNATIVE 3 COULD BE IMPLEMENTED, THE ENTIRE AFFECTED AREA WOULD FIRST HAVE TO ANNEX TO THE CITY OF EAU CLAIRE. ANNEXATION IS A PERSONAL DECISION AND NOT SOMETHING US EPA CAN RECOMMEND OR ENFORCE. GIVEN THE POLITICAL CLIMATE AND THE DESIRE FOR SELF GOVERNMENT BY A MAJORITY OF THE TOWN OF HALLIE CITIZENS, US EPA DETERMINED THIS ALTERNATIVE TO BE UNIMPLEMENTABLE. THE SELECTED REMEDY IS IMPLEMENTABLE BECAUSE IT ACCOMMODATES THOSE RESIDENCES AND BUSINESSES WHO HAVE ANNEXED TO EAU CLAIRE.

COMMENT: SOME COMMENTORS WERE CONCERNED THAT SEVERAL DIFFERING ESTIMATES OF THE COSTS OF THE VARIOUS ALTERNATIVES HAD BEEN PROVIDED BY THE TOWN OF HALLIE, NPI, CITY OF EAU CLAIRE, AND US EPA.

US EPA RESPONSE: US EPA RECOGNIZES THE DISCREPANCIES IN THE COST ESTIMATES PROVIDED BY DIFFERENT PARTIES AND UNDERSTANDS THE CONFUSION THIS CAN CAUSE. FOR PURPOSES OF IDENTIFYING A PREFERRED ALTERNATIVE, US EPA CONSIDERED THE COST ESTIMATES INCLUDED IN THE PFS. THESE ESTIMATES WERE PREPARED BY NPI. THE PFS CONTAINED THE NECESSARY DOCUMENTATION AND ASSUMPTIONS TO SUPPORT NPI'S COST ESTIMATES. ALTHOUGH OPERATION AND MAINTENANCE COSTS ARE NOT PART OF THE SELECTED REMEDY, US EPA ALSO RECOGNIZES THE IMPORTANCE OF ACCURATE COST INFORMATION IN ORDER FOR CITIZENS TO MAKE INFORMED DECISIONS ABOUT THEIR PREFERENCE. OTHER ESTIMATES PREPARED BY THIRD PARTIES WERE ONLY CONSIDERED IN REACHING THE DECISION ON THE FINAL REMEDY IF THEY WERE SUBMITTED TO US EPA DURING THE PUBLIC COMMENT PERIOD. US EPA CERTAINLY PLACES MORE CREDIBILITY IN THE OPERATION AND MAINTENANCE COST ESTIMATES FOR THE DISTRICT PREPARED BY THE PSC AS WELL AS OPERATION AND MAINTENANCE COSTS FOR EAU CLAIRE PREPARED BY THE CITY.

COMMENT: SEVERAL RESIDENTS COMMENTED THAT NPI SHOULD BE REQUIRED TO PAY FOR THE FINAL REMEDY.

US EPA RESPONSE: IT IS US EPA'S INTENTION TO FIRST PROVIDE THE RESPONSIBLE PARTIES, INCLUDING NPI, THE OPPORTUNITY TO IMPLEMENT THE SELECTED REMEDY. IF THE RESPONSIBLE PARTIES ARE UNWILLING TO FINANCE THE SELECTED REMEDY, IT IS US EPA'S INTENTION TO IMPLEMENT THE REMEDIAL ACTION THROUGH SUPERFUND AND PURSUE REIMBURSEMENT FROM THE RESPONSIBLE PARTIES.

COMMENT: SEVERAL RESIDENTS COMMENTED THAT THEY SHOULD BE COMPENSATED FOR INCONVENIENCE AND LONG-TERM EFFECTS.

US EPA RESPONSE: THERE ARE NO PROVISIONS IN CERCLA AUTHORIZING US EPA TO COMPENSATE RESIDENTS FOR INCONVENIENCE, LOSS IN PROPERTY VALUES OR POTENTIAL LONG-TERM HEALTH EFFECTS. CONSEQUENTLY, US EPA CANNOT REQUIRE THE RESPONSIBLE PARTIES TO COMPENSATE RESIDENTS FOR THESE REASONS. RESIDENTS MAY WANT TO CONSULT WITH THEIR ATTORNEYS REGARDING THESE ISSUES.

COMMENT: SEVERAL RESIDENTS COMMENTED NPI SHOULD BE REQUIRED TO PAY FOR WATER USAGE BY RESIDENTS IN THE AFFECTED AREA.

US EPA RESPONSE: OPERATION AND MAINTENANCE COSTS ARE THE RESPONSIBILITY OF THE DISTRICT THROUGH CUSTOMER WATER BILLS AND OTHER SPECIAL USER FEES, IF ANY, THAT THE DISTRICT DETERMINES ARE APPROPRIATE.

COMMENT: ONE RESIDENT EXPRESSED CONCERN REGARDING THE NUMBER OF EMPLOYEES WHICH MAY BE REQUIRED TO OPERATE AND MAINTAIN THE PROPOSED DISTRICT DRINKING WATER SYSTEM.

US EPA RESPONSE: SALARIES FOR SUPPORT STAFF TO OPERATE AND MAINTAIN THE DISTRICT WILL BE PAID BY THE DISTRICT THROUGH USER FEES WHICH ARE NOT A COMPONENT OF THE SELECTED REMEDY. THIS CONCERN IS MORE APPROPRIATELY ADDRESSED BY THE DISTRICT.

COMMENT: ONE COMMENTOR EXPRESSED CONCERN THAT THE TOWN OF HALLIE HAD INCURRED EXPENSES TO ESTABLISH THE DISTRICT WITHOUT US EPA APPROVAL, AND THAT THE TOWN WOULD THEREFORE NOT BE COMPENSATED FOR THOSE EXPENSES.

US EPA RESPONSE: US EPA AGREES WITH THE COMMENTOR'S CONCERN. PRIOR TO A RECORD OF DECISION, US EPA CANNOT AUTHORIZE FUNDS FOR REMEDIAL DESIGN OR REMEDIAL ACTION ACTIVITIES. LOCAL OFFICIALS WERE MADE AWARE OF THIS FACT IN AN OCTOBER 1989 LETTER TO THE CITY OF EAU CLAIRE AND THE TOWN OF HALLIE. ACTIONS TAKEN BY THE TOWN OF HALLIE AND CITY OF EAU CLAIRE HAVE CERTAINLY INFLUENCED THE SELECTION OF THE FINAL REMEDY; HOWEVER, MONIES SPENT BY THE TOWN OF HALLIE, THE DISTRICT, OR THE CITY OF EAU CLAIRE ARE NOT REIMBURSABLE BY SUPERFUND. COMPENSATION FROM NPI FOR NON-PREAUTHORIZED EXPENSES BY THE TOWN OF HALLIE IS AN ISSUE FOR THOSE PARTIES TO SETTLE ON THEIR OWN.

#### TECHNICAL

COMMENT: ONE COMMENTOR OPPOSED THE SELECTION OF ALTERNATIVE 5 BECAUSE IT COULD CAUSE CONES OF DEPRESSION. THESE WOULD RESULT IN CONTAMINATION MOVING LOWER INTO THE GROUNDWATER AND THEREBY CONTAMINATING THE REPLACEMENT WELLS TO BE CONSTRUCTED UNDER THIS ALTERNATIVE.

US EPA RESPONSE: US EPA AGREES WITH THE COMMENTOR. ONE UNCERTAINTY WITH ALTERNATIVE 5 IS THE POTENTIAL CONTAMINATION OF THE REPLACEMENT WELLS. THIS ALTERNATIVE WOULD REQUIRE EXTENSIVE SAMPLING AND ANALYSIS TO VERIFY AN UNCONTAMINATED WATER SUPPLY AT THE TIME OF CONSTRUCTION AND THEREAFTER. AFTER CONSIDERING THE TRADEOFFS BETWEEN EACH ALTERNATIVE, US EPA DECIDED ON THE REMEDY DESCRIBED IN THE ROD.

#### LONG-TERM EFFECTIVENESS

COMMENT: TWO COMMENTORS WERE CONCERNED THAT THE CONTAMINATION MAY SPREAD

BEYOND THE EXISTING AFFECTED AREA. ONE RESIDENT SUPPORTED EXTENDING DRINKING WATER TO RESIDENTS WHO DID NOT RESIDE IN THE AFFECTED AREA IN ANTICIPATION OF THE SPREAD OF CONTAMINANTS. OTHER COMMENTORS QUESTIONED WHETHER WATER SERVICE WOULD BE EXTENDED IF CONTAMINATION SPREADS BEYOND THE EXISTING AFFECTED AREA.

US EPA RESPONSE: BASED ON AVAILABLE INFORMATION, CONTAMINATION IS NOT EXPECTED TO MOVE BEYOND THE AFFECTED AREA. THE REMEDIAL ACTION INCLUDES A GROUNDWATER MONITORING PROGRAM FOR PRIVATE WELLS OUTSIDE THE AFFECTED AREA THAT CONTINUE TO BE USED FOR DRINKING WATER. THE FINAL BOUNDARIES OF THE AFFECTED AREA WERE BASED ON CAREFUL EVALUATION OF THE PRIVATE WELL DATA COLLECTED OVER THE PAST SEVERAL YEARS. US EPA BELIEVES THAT AN APPROPRIATE SAFETY ZONE WAS ESTABLISHED BASED ON THE LIMITS OF CONTAMINATION AND DIRECTION OF GROUNDWATER MOVEMENT. GROUNDWATER MONITORING WILL CONTINUE DURING AND FOLLOWING REMEDIAL ACTION, AND IF IT IS DETERMINED THAT MOVEMENT BEYOND THE AFFECTED AREA HAS OCCURRED OR IS LIKELY TO OCCUR, THE REMEDY MAY BE MODIFIED TO ENSURE PROTECTION OF HUMAN HEALTH.



## REMEDIAL INVESTIGATION PROCESS

COMMENT: ONE PERSON COMMENTED THAT US EPA HAS KNOWN OF THE PROBLEM FOR MANY YEARS, YET HAS DELAYED IMPLEMENTING A SOLUTION.

US EPA RESPONSE: UNDER THE SUPERFUND LAW, US EPA MUST ADHERE TO THE REMEDIAL PROCESS SPECIFIED BY LAW AND US EPA POLICY AND GUIDANCE. EACH REMEDIAL ACTIVITY REQUIRES TIME TO COMPLETE. US EPA ADOPTED AN "OPERABLE UNIT" APPROACH TO EXPEDITE THE IMPLEMENTATION OF A PERMANENT DRINKING WATER SUPPLY. AN OPERABLE UNIT APPROACH INVOLVES THE DEVELOPMENT AND IMPLEMENTATION OF SEPARATE ACTIONS TAKEN AS PART OF AN OVERALL SITE CLEAN UP. (A NUMBER OF OPERABLE UNITS CAN BE USED IN THE COURSE OF A SITE CLEAN UP). THIS APPROACH ALLOWS THE AGENCY TO ADDRESS THREATS POSED TO HUMAN HEALTH BY GROUNDWATER CONTAMINATION WHILE THE INVESTIGATION OF CLEAN-UP ALTERNATIVES FOR THE SOURCE MATERIAL AND CONTAMINATED GROUNDWATER AT THE SITE PROCEEDED.

THE STATE OF WISCONSIN ATTEMPTED TO RESOLVE THIS SITUATION IN SEPTEMBER 1986, BY ISSUING AN ORDER TO NPI REQUIRING IT TO REPLACE CONTAMINATED DRINKING WATER SUPPLIES IN THE TOWN OF HALLIE, CONDUCT FURTHER INVESTIGATIONS OF THE EXTENT OF CONTAMINATION AND CLEAN UP CONTAMINATED GROUNDWATER AND SOILS. NPI APPEALED THE ORDER AND THE MATTER REMAINS IN LITIGATION.

COMMENT: SEVERAL RESIDENTS ENCOURAGED US EPA TO ADDRESS THE SOURCE OF GROUNDWATER CONTAMINATION BY CLEANING UP THE SITE.

US EPA RESPONSE: THIS REMEDIAL ACTION PERTAINS ONLY TO THE IMPLEMENTATION OF A PERMANENT DRINKING WATER SUPPLY TO ADDRESS CONTAMINATION OF GROUNDWATER RESULTING FROM PAST WASTE DISPOSAL PRACTICES AT THE SITE. FUTURE "OPERABLE UNIT(S)" WILL ADDRESS THE CLEAN-UP OF ON-SITE SOURCES OF CONTAMINATION, INCLUDING GROUNDWATER.

## OTHER COMMENTS

COMMENT: TWO RESIDENTS COMMENTED THAT THEY FAVORED ALTERNATIVE 2 OVER ALTERNATIVE 3 BECAUSE WATER FROM THE TOWN OF HALLIE TASTED BETTER THAN WATER FROM THE CITY OF EAU CLAIRE.

US EPA RESPONSE: US EPA DID NOT CONSIDER POTENTIAL DIFFERENCES IN TASTE BETWEEN DRINKING WATER FROM THE CITY OF EAU CLAIRE AND THE TOWN OF HALLIE. TASTE IS A HIGHLY SUBJECTIVE QUALITY WHICH IS BEYOND THE SCOPE OF THE PFS. BOTH ALTERNATIVES 2 AND 3 WOULD ELIMINATE CONTACT WITH AND CONSUMPTION OF CONTAMINATED GROUNDWATER WHICH POSES A PUBLIC HEALTH THREAT.

COMMENT: ONE RESIDENT OF THE AFFECTED AREA SUPPORTED ALTERNATIVE 4 BECAUSE IT WOULD REQUIRE ONLY THE WELLS AFFECTED BY GROUNDWATER CONTAMINATION TO RECEIVE INDIVIDUAL HOME AND BUSINESS TREATMENT UNITS.

US EPA RESPONSE: THE FACT THAT SOME PRIVATE WELLS ARE NOT PRESENTLY CONTAMINATED DOES NOT MEAN THEY WILL NOT BE AFFECTED BY CONTAMINATION IN THE FUTURE. THE GROUNDWATER ENVIRONMENT IS COMPLEX AND CONCENTRATIONS WITHIN A CONTAMINATION PLUME VARY OVER TIME. TO ONLY SERVICE CONTAMINATED PRIVATE WELLS WITH TREATMENT UNITS WOULD REQUIRE EXTENSIVE MONITORING BEYOND WHAT WOULD ALREADY BE REQUIRED TO IMPLEMENT ALTERNATIVE 4 TO GUARANTEE A CONTINUED SUPPLY OF SAFE DRINKING WATER. US EPA AND WDNR DO NOT BELIEVE ALTERNATIVE 4 PROVIDES FOR LONG-TERM EFFECTIVENESS AND PERMANENCE AND THEREFORE ELIMINATED TREATMENT UNITS FROM FURTHER CONSIDERATION.

COMMENT: ONE PERSON COMMENTED THAT ALTERNATIVE 6 WAS PREFERABLE TO ALTERNATIVE 2 BECAUSE IT WOULD RESULT IN WATER SERVICE ONLY BEING PROVIDED TO THE AFFECTED AREA AND NOT TO OTHER AREAS WHERE NO NEED EXISTED FOR A PUBLIC DRINKING WATER SUPPLY.

US EPA RESPONSE: THE PURPOSE OF THE PFS WAS TO EVALUATE ALTERNATIVES FOR A PERMANENT DRINKING WATER SUPPLY FOR ONLY THE AFFECTED AREA AND NOT TO ASSESS THE NEEDS FOR WATER SERVICE FOR THE ENTIRE DISTRICT. US EPA WAS CERTAINLY AWARE OF THE PLANS AND POLICIES OF THE HALLIE SANITARY DISTRICT TO SERVICE RESIDENCES AND BUSINESSES OUTSIDE OF THE AFFECTED AREA; HOWEVER, THIS WAS NOT FACTORED INTO THE REMEDY SELECTION PROCESS. THE PSC ORDER ADDRESSED THE NEED FOR A PUBLIC DRINKING WATER SUPPLY FOR THE DISTRICT BY GRANTING THE DISTRICT THE AUTHORITY TO CONSTRUCT AND OPERATE AS A WATER DISTRICT UTILITY. THE PSC DECISION ALSO HAD AN IMPACT ON

THE FINAL REMEDY SELECTED BY US EPA.

COMMENT: ONE COMMENTOR SUPPORTED ALTERNATIVE 2, WITH THE BELIEF THAT PORTIONS OF THE TOWN OF HALLIE WHICH HAVE ANNEXED TO THE CITY OF EAU CLAIRE SHOULD BE INCLUDED IN THE SERVICE AREA OF THE DISTRICT RATHER THAN THAT OF THE CITY OF EAU CLAIRE.

US EPA RESPONSE: THE IDENTIFICATION OF ALTERNATIVE 2 AS THE PREFERRED REMEDY AND AS THE SELECTED REMEDY IN THE ROD REFLECTS, IN PART, US EPA'S SENSITIVITY TO THE PREFERENCES OF RESIDENTS IN THE AFFECTED AREA FOR AN ALTERNATIVE WHICH DID NOT INVOLVE SERVICE BY EAU CLAIRE, WITH OR WITHOUT ANNEXATION. HOWEVER, OTHER RESIDENTS OF THE AFFECTED AREA HAVE SUCCESSFULLY ANNEXED TO THE CITY OF EAU CLAIRE. THE SELECTED REMEDY WOULD ALLOW THESE RESIDENCES TO RECEIVE A PERMANENT DRINKING WATER SUPPLY FROM THE CITY OF EAU CLAIRE TO WHICH THEY HAVE ALREADY ANNEXED. THE QUESTION TO WHICH US EPA CANNOT RESPOND IS: AT WHAT POINT DOES THE DISTRICT (OR THE CITY OF EAU CLAIRE) NOT HAVE THE AUTHORITY TO SERVICE AREAS WITHIN THE DISTRICT THAT HAVE ANNEXED TO EAU CLAIRE?

COMMENT: ONE RESIDENT EXPRESSED CONDITIONAL SUPPORT FOR ALTERNATIVE 2 CONTINGENT ON THE DISTRICT PROVIDING ONLY DRINKING WATER AND NOT PROVIDING FIRE PROTECTION SERVICES.

US EPA RESPONSE: FIRE PROTECTION IS AN ELEMENT OF THE SELECTED REMEDY. THE SELECTED REMEDY MUST COMPLY WITH EAU CLAIRE AND DISTRICT CODES FOR THE RESPECTIVE SERVICE AREAS, WHICH REQUIRE FIRE PROTECTION AND SIZING THE SYSTEM TO MEET MINIMUM FIRE PROTECTION REQUIREMENTS SET BY STATE CODE.

COMMENT: ONE RESIDENT EXPRESSED CONCERN THAT DREDGING OF PONDS ON THE NATIONAL PRESTO PROPERTY MAY HAVE RESULTED IN OFF-SITE RELEASES OF CONTAMINATION.

US EPA RESPONSE: US EPA IS NOT AWARE OF ANY PAST DREDGING ACTIVITIES OF THE WASTE DISPOSAL LAGOONS. WITH THE EXCEPTION OF PORTIONS OF LAGOON 1 HAVING BEEN COVERED, THEY HAVE REMAINED UNCHANGED SINCE USE DISCONTINUED. AN EXAMINATION OF THE NATURE AND EXTENT OF CONTAMINATION AT AND NEAR THE SITE, AND OF REMEDIAL ALTERNATIVES FOR ADDRESSING ON-SITE SOURCES AND CONTAMINATED GROUNDWATER, WILL TAKE PLACE IN THE NEXT PHASE OF THE INVESTIGATION.

RESPONSES TO COMMENTS SUBMITTED BY A PRP (NPI) AND GOVERNMENTAL BODIES

SCOPE OF THE PREFERRED REMEDY

COMMENT: NPI BELIEVED THE PREFERRED REMEDY IS TOO BROAD BECAUSE THE ALTERNATE WATER SUPPLY SYSTEMS ARE SIZED AND EQUIPPED FOR FIRE PROTECTION, A FUNCTION WHICH IS BEYOND THE SCOPE OF A CERCLA REMEDY. THE ADDITIONAL FEATURES OF THE SYSTEMS BEYOND WHAT IS NECESSARY TO DELIVER HOUSEHOLD WATER SUPPLIES INCLUDE OVERSIZED MAINS, FIRE HYDRANTS, AND SOME DEGREE OF INCREASED STORAGE CAPACITY, AT A TOTAL COST OF APPROXIMATELY \$500,000.

US EPA RESPONSE: THE INCLUSION OF FIRE PROTECTION AS AN ELEMENT OF THE REMEDIAL ACTION FOR THE PERMANENT ALTERNATIVE WATER SUPPLIES IS DIRECTLY RELATED TO INSURING THAT THE WATER SUPPLY SYSTEMS COMPLY WITH MINIMUM DESIGN STANDARDS OF THE DISTRICT AND CITY OF EAU CLAIRE.

LOCAL CODES SET THE MINIMUM DESIGN STANDARDS FOR A PUBLIC WATER SUPPLY AND ESTABLISH THE PREMISE FOR PROVIDING FIRE PROTECTION. FOR THOSE PORTIONS OF THE AFFECTED AREA THAT HAVE ANNEXED TO EAU CLAIRE, ITS MUNICIPAL CODES APPLY. EAU CLAIRE CITY ORDINANCES, SECTION 14.08.150 - WATER MAIN INSTALLATION IN PLATTED SUBDIVISIONS STATES IN PART: "...THE PUBLIC WORKS DEPARTMENT SHALL DEVELOP PLANS FOR THE EXTENSION OF MAINS TOGETHER WITH THE INSTALLATION OF SERVICE LATERALS AND HYDRANTS REQUIRED TO ADEQUATELY SERVE THE AREA AND PROVIDE PUBLIC FIRE PROTECTION. THE WATER UTILITY WILL PREPARE DETAILED ESTIMATES OF THE COST OF EXTENDING WATER MAINS AND HYDRANTS OF THE SIZE DEEMED NECESSARY IN THE SUBDIVISION AND SUBMIT THE SAME TO THE CITY COUNCIL FOR APPROVAL OF THE EXTENSION AS IT PERTAINS TO PUBLIC FIRE-PROTECTION SERVICE REQUIREMENTS." MINIMUM PUBLIC FIRE PROTECTION REQUIREMENTS FOR MUNICIPAL SYSTEMS ARE SET BY STATE CODE.

THE DISTRICT ADOPTED RULES AND PROCEDURES ON OCTOBER 30, 1989. SECTION 4(A) STATES: "THE DISTRICT SHALL PROVIDE WATER HYDRANTS THROUGHOUT THE DISTRICT WHERE WATER MAINS ARE INSTALLED IN ACCORDANCE WITH APPROPRIATE STANDARDS FOR EFFICIENT FIRE PROTECTION." THIS RULE APPLIES TO PRIVATE WELL USERS WITHIN THE AFFECTED AREA

THAT ARE ALSO WITHIN THE JURISDICTION OF THE DISTRICT. ANY REMEDIAL ACTION, WHETHER FINANCED BY THE RESPONSIBLE PARTIES OR US EPA, FOR PROVIDING A PERMANENT DRINKING WATER SUPPLY TO THE AFFECTED AREA WOULD BE EXPECTED TO COMPLY WITH EXISTING STATE AND LOCAL CODES. THE FINANCIAL RESPONSIBILITY FOR UPGRADING A SYSTEM ABOVE THE MINIMUM DESIGN REQUIREMENTS ESTABLISHED BY THE STATE WILL REST WITH THE GOVERNING BODY AND ITS PATRONS.

NPI'S REFERENCES APPARENTLY INCLUDE FIRE PROTECTION AS AN ELEMENT OF ITS MOST RECENT PREFERENCE FOR A FINAL REMEDY. COST ESTIMATES PRESENTED IN THE PFS FOR EAU CLAIRE SUPPLY WITH AND WITHOUT FIRE PROTECTION ARE APPROXIMATELY \$1.6 AND \$1.1 MILLION, RESPECTIVELY. IN A MEMORANDUM OF UNDERSTANDING BETWEEN THE CITY OF EAU CLAIRE, NPI, AND THE DEPARTMENT OF THE ARMY (ANOTHER PRP), NPI AND THE ARMY GUARANTEE PAYMENT OF UP TO \$1.6 MILLION FOR THE COST OF EXTENDING THE CITY'S MUNICIPAL WATER SUPPLY TO THE AFFECTED AREA. THIS DOLLAR FIGURE IS ALSO REFERENCED BY NPI IN ITS MARCH 5, 1990 RESPONSE TO THE PROPOSED PLAN AS THE APPROXIMATE COST FOR SERVING THE AFFECTED AREA FROM THE EAU CLAIRE SYSTEM.

COMMENT: NPI STATED THE PREFERRED REMEDY IS TOO BROAD IN TERRITORIAL SCOPE, BECAUSE IT EXTENDS WATER TO USERS WHOSE EXISTING WATER SUPPLIES ARE NOT CONTAMINATED OR THREATENED WITH CONTAMINATION. CERCLA DOES NOT AUTHORIZE THE PROVISION OF ALTERNATE WATER SUPPLIES TO ANY USER WHOSE EXISTING WATER SUPPLY IS NOT CONTAMINATED OR THREATENED WITH CONTAMINATION. THE PREFERRED REMEDY WOULD PROVIDE WATER TO APPROXIMATELY 225 USERS. FOR MANY OF THESE USERS, THERE IS NO EVIDENCE THAT THE EXISTING WATER SUPPLY IS ACTUALLY CONTAMINATED NOR ANY REASONABLE BASIS TO BELIEVE THAT IT IS THREATENED WITH CONTAMINATION.

US EPA RESPONSE: ESTABLISHING A MARGIN OF SAFETY OR BUFFER ZONE ADJACENT TO A KNOWN AREA OF GROUNDWATER CONTAMINATION IS A TECHNICALLY SOUND APPROACH CONSISTENT WITH SUPERFUND REMEDIES WHERE PRIVATE DRINKING WATER WELLS ARE IMPACTED. IT IS UNCLEAR FROM THE COMMENT TO WHICH PORTIONS OF THE AFFECTED AREA THE COMMENT REFERS. HOWEVER, GIVEN THE DISTRIBUTION OF OFF-SITE CONTAMINATION, THE ONLY PORTION OF THE AFFECTED AREA THIS COMMENT CAN REASONABLY REFER TO IS THE EASTERN BOUNDARY OF THE AFFECTED AREA, HALIFAX STREET.

GROUNDWATER DATA EXISTS FROM NUMEROUS SAMPLING EVENTS DATING TO 1985; HOWEVER, THERE HAS NOT BEEN A SAMPLING PROGRAM CONDUCTED OVER AN EXTENDED PERIOD OF TIME TO ESTABLISH ANY TRENDS OR SEASONAL FLUCTUATIONS IN BOTH DISTRIBUTION AND CONCENTRATION OF CONTAMINANTS. QUARTERLY SAMPLING OF SELECTED PRIVATE WELLS WITHIN THE AFFECTED AREA WAS INITIATED BY NPI IN LATE 1988 AS PART OF THE RI, AND WILL CONTINUE UNTIL AT LEAST THE IMPLEMENTATION OF REMEDIAL ACTION.

DATA FROM THE MAY 1986 EXISTING CONDITIONS REPORT PREPARED BY A CONSULTING FIRM CONTRACTED BY WDNR, DETECTED VOCs IN PRIVATE WELLS ON HALIFAX STREET. PRIVATE WELL (PW) DATA COLLECTED DURING THE RI DETECTED THE SAME VOCs ALONG THE EASTERN BOUNDARY OF THE AFFECTED AREA (PW-203, PW-25, PW-64, AND PW-33). REFER TO FIGURE 6 IN THE ROD FOR THE LOCATION OF PRIVATE WELLS SAMPLED. VOC DETECTIONS WERE SPORADIC AND CONCENTRATIONS WERE SIGNIFICANTLY BELOW EXISTING STATE STANDARDS AND HEALTH-BASED LEVELS; HOWEVER, GIVEN THE DIRECTION OF GROUNDWATER MOVEMENT, THEIR PRESENCE IDENTIFIED THIS AS THE LIKELY FRINGE OF THE CONTAMINANT PLUME ORIGINATING FROM THE NPI SITE.

FOR PRACTICAL AND PLANNING PURPOSES, FINAL BOUNDARIES OF THE AFFECTED AREA WERE ESTABLISHED ALONG STREETS TO INCLUDE RESIDENCES AND BUSINESSES ON BOTH SIDES OF THE STREET. THIS ALSO DEFINED AN APPROPRIATE MARGIN OF SAFETY FOR THE AFFECTED AREA. US EPA BELIEVES THE AFFECTED AREA IS PROPERLY DEFINED BASED ON THE INFORMATION PRESENTLY AVAILABLE. TO EXCLUDE AN APPROPRIATE MARGIN OF SAFETY ZONE WOULD REQUIRE EXTENSIVE MONITORING FOR AN UNDETERMINED PERIOD OF TIME TO ENSURE THAT CONTAMINATION DOES NOT MIGRATE BEYOND THE BOUNDARIES OF THE AFFECTED AREA.

COMMENT: NPI BELIEVES THE PREFERRED REMEDY SUFFERS FROM ONE OVERRIDING CONCEPTUAL FLAW; IT IGNORES THE CONSTANTLY CHANGING JURISDICTIONAL LANDSCAPE OF THE "AFFECTED AREA." RATHER THAN ADDRESSING THIS CRITICAL ASPECT, THE REMEDY ATTEMPTS TO FREEZE THE AFFECTED AREA TO A SPECIFIC POINT IN TIME. WHILE SUCH AN ATTEMPT HAS ADMINISTRATIVE APPEAL, IT DOESN'T COMPORT WITH REALITY. AS A RESULT, THE REMEDY BECOMES MEANINGLESS AS THE JURISDICTIONAL LANDSCAPE EVOLVES NOTWITHSTANDING THE EPA-IMPOSED FREEZE.

US EPA RESPONSE: AN OCTOBER 13, 1989 LETTER FROM US EPA TO ERIC ANDERSON, CITY MANAGER OF EAU CLAIRE AND DAVE MEIER, HALLIE TOWN CHAIRMAN, ACKNOWLEDGED THE UNCERTAINTIES AND POTENTIAL FOR JURISDICTIONAL CHANGE WITHIN THE AFFECTED AREA. THE INTENT OF THE LETTER WAS TO ESTABLISH STABLE BOUNDARIES FOR THE PURPOSE OF SELECTING

A PREFERRED ALTERNATIVE ONLY. THE LETTER STATES: "FURTHER CHANGES TO THE CITY BOUNDARY WOULD REQUIRE A REEVALUATION OF ALTERNATIVES THUS DELAYING THE IMPLEMENTATION OF A PERMANENT ALTERNATE WATER SUPPLY FOR THE AFFECTED AREA THROUGH SUPERFUND AUTHORITIES."

NPI DOES NOT MAKE THE NECESSARY DISTINCTION BETWEEN THE PREFERRED ALTERNATIVE AND THE SELECTED ALTERNATIVE. THE PREFERRED ALTERNATIVE IDENTIFIED IN THE PROPOSED PLAN WAS BASED ON INFORMATION GATHERED DURING THE PREPARATION OF THE PFS. US EPA HAS CAREFULLY EVALUATED ALL THE INFORMATION GATHERED DURING THE PUBLIC COMMENT PERIOD PRIOR TO SELECTING THE FINAL REMEDY. THE SELECTED ALTERNATIVE IS DETAILED IN THIS ROD WHICH CERTIFIES THAT THE REMEDY SELECTION PROCESS WAS CARRIED OUT IN ACCORDANCE WITH CERCLA, AS AMENDED, AND PROVIDES THE RATIONALE BEHIND THE SELECTION. A SELECTED ALTERNATIVE MAY DIFFER FROM THE PREFERRED ALTERNATIVE.

CONTRARY TO NPI'S STATEMENTS, THE SELECTED REMEDY IS A REFLECTION OF REALITY. IT RECOGNIZES THE EVOLVING JURISDICTIONAL LANDSCAPE OF THE AFFECTED AREA BY ACCOMMODATING THE PREFERENCES OF BUSINESSES AND RESIDENCES IN THE AFFECTED AREA. US EPA ACKNOWLEDGES THAT CONTINUING JURISDICTIONAL DISPUTES BETWEEN THE TOWN OF HALLIE AND THE CITY OF EAU CLAIRE COULD DELAY THE TIMELY IMPLEMENTATION OF PORTIONS OF THE SELECTED REMEDY. THE BOUNDARIES OF THE RESPECTIVE SERVICE AREAS MAY ULTIMATELY BE DETERMINED BY WISCONSIN COURTS THROUGH THEIR INTERPRETATION OF STATE LAW. HOWEVER, THE DISTRICT PORTION OF THE SELECTED REMEDY AND ANNEXATIONS BY EAU CLAIRE NOT DISPUTED BY THE TOWN OF HALLIE ARE IMMEDIATELY IMPLEMENTABLE FOLLOWING WDNR'S APPROVAL OF WATER SUPPLY SYSTEM DESIGN AND AVAILABILITY OF FUNDS FOR CONSTRUCTION.

COMMENT: THE CITY OF EAU CLAIRE NOTED THAT THE DISTRICT WILL NOT HAVE THE ABILITY TO PROVIDE SANITARY SEWER TO THE AREA. IT IS MOST LIKELY THAT GROWTH AREAS WITHIN THE TOWN OF HALLIE WILL EVENTUALLY BECOME PART OF A CITY AS THE NEED FOR MUNICIPAL SERVICES INCREASE.

US EPA RESPONSE: PROVIDING OR PLANNING FOR OTHER MUNICIPAL SERVICES, INCLUDING SEWER, IS BEYOND THE SCOPE OF THE PREFERRED AND SELECTED REMEDIES. THE REMEDIAL OBJECTIVE UNDER THIS OPERABLE UNIT IS THE SELECTION OF AN IMPLEMENTABLE AND PERMANENT REPLACEMENT WATER SUPPLY FOR THE AFFECTED AREA THAT PROTECTS HUMAN HEALTH. THE PROVIDER OF FUTURE SERVICES IN THE TOWN OF HALLIE, IF DETERMINED TO BE APPROPRIATE BY LOCAL GOVERNMENT, IS NOT SOMETHING FOR US EPA TO PLAY A ROLE IN OR DECIDE. US EPA IS HOPEFUL THAT THE CITIES OF CHIPPEWA FALLS AND EAU CLAIRE AND THE TOWN OF HALLIE WILL COOPERATE ON A REGIONAL LEVEL TO ADDRESS LOCAL NEEDS AND CONCERNS OF THE RESPECTIVE COMMUNITIES.

COMMENT: THE CITY OF EAU CLAIRE INDICATED THAT THE DISTRICT IS DESIGNED TO SERVE USERS OUTSIDE THE AFFECTED AREA AND PROVIDES LARGER MAINS TO SERVE FUTURE CUSTOMERS, AND HIGHER FIRE FLOWS THAN REQUIRED BY STATE CODE OR NORMAL PRACTICE. THE PROPOSED SYSTEM PROVIDES FACILITIES UNREASONABLY IN EXCESS OF IMMEDIATE NEEDS TO SERVE THE AFFECTED AREA. THE DISTRICT'S PROPOSAL TO THE PSC LACKS SUFFICIENT DETAIL (NO UNIT COST INFORMATION, SIZE OF STORAGE RESERVOIR NOT SPECIFIED) TO EFFECTIVELY EVALUATE THE DISTRICT'S COST ESTIMATES.

US EPA RESPONSE: THE SELECTED REMEDY ONLY PROVIDES FOR A REPLACEMENT DRINKING WATER SUPPLY, INCLUDING FIRE PROTECTION, FOR THE AFFECTED AREA. THE FINAL SYSTEM DESIGN IS SUBJECT TO APPROVAL BY WDNR. IF SYSTEM SPECIFICATIONS, FOR EXAMPLE SIZE OF MAINS AND STORAGE FACILITIES, ARE DESIGNED ABOVE THE MINIMUM DESIGN STANDARDS ESTABLISHED BY STATE CODE AND WHAT IS REQUIRED TO SERVICE ONLY THE AFFECTED AREA, THE COSTS ASSOCIATED WITH IMPROVEMENTS WILL BE THE RESPONSIBILITY OF THE DISTRICT. THE DISTRICT'S FINANCIAL OBLIGATIONS ALSO INCLUDE UPGRADES DESIGNED SPECIFICALLY TO ACCOMMODATE FUTURE GROWTH OF THE DISTRICT.

WDNR WILL REQUIRE SUFFICIENT DESIGN DETAIL PRIOR TO APPROVING THE PROPOSAL FOR CONSTRUCTION. IN THE EVENT US EPA IMPLEMENTS THE REMEDIAL ACTION, THE AGENCY WILL ENSURE ADEQUATE DETAIL TO JUSTIFY EXPENDITURE OF SUPERFUND MONIES FOR THE AFFECTED AREA.

COMMENT: THE TOWN OF HALLIE POINTED OUT THE FACT THAT THE HRDLICKA AND RUSSELL ANNEXATIONS REFERENCED IN THE PROPOSED PLAN AS PART OF THE EAU CLAIRE SERVICE AREA, WERE RENDERED VOID BY THE CHIPPEWA COUNTY CIRCUIT COURT ON DECEMBER 29, 1989 AND JANUARY 24, 1990, RESPECTIVELY. THESE PARCELS REMAIN IN THE TOWN OF HALLIE AND ARE TO BE SERVED BY THE DISTRICT. THE SCHONG ANNEXATION ORDINANCE IS PRESENTLY IN LITIGATION AND MAY BE RENDERED VOID. THESE CIRCUIT COURT DECISIONS ELIMINATED THE NEED FOR DUPLICATION OF SERVICES, REGARDLESS OF THE COURT'S DECISION ON THE SCHONG ANNEXATION.

US EPA RESPONSE: THE PROPOSED PLAN "FROZE" JURISDICTIONAL BOUNDARIES FOR PURPOSES OF IDENTIFYING ONLY A PREFERRED ALTERNATIVE. THE DECISION TO ANNEX IS A PERSONAL CHOICE IN WHICH US EPA HAS NO ROLE OR CONTROL OTHER THAN TO HIGHLIGHT THE IMPACT IT MAY HAVE ON THE IMPLEMENTATION OF THE FINAL REMEDY OR PORTIONS THEREOF.

JURISDICTIONAL DISPUTES BETWEEN THE TOWN OF HALLIE AND CITY OF EAU CLAIRE OVER THE BOUNDARIES OF THE RESPECTIVE SERVICE AREAS ARE NOT FOR US EPA TO RESOLVE. INTERPRETATION OF STATE LAW AS IT RELATES TO THE LEGALITY OF ANNEXATIONS AND WHO SERVICES ANNEXED LAND, RESTS WITH APPROPRIATE STATE AGENCIES AND ULTIMATELY WITH WISCONSIN COURTS. SUCH DISPUTES AND LITIGATION MAY DELAY IMPLEMENTATION OF PORTIONS OF THE SELECTED REMEDY; HOWEVER, THE DESIGN AND CONSTRUCTION OF FACILITIES TO SERVICE THE DISTRICT AND UNDISPUTED ANNEXATIONS TO EAU CLAIRE CAN PROCEED WITHOUT DELAY.

COMMENT: WISCONSIN STATUTE 60.79(2) PROVIDES THE METHODOLOGY FOR HANDLING INCORPORATIONS OF PART OF THE DISTRICT INTO EAU CLAIRE. WHERE THE ANNEXATIONS CONSTITUTE LESS THAN ONE-HALF OF THE ENTIRE DISTRICT, THE TERRITORY ANNEXED WILL CONTINUE TO BE SERVED BY THE DISTRICT, EVEN THOUGH AN ANNEXATION HAS OCCURRED. ACCORDINGLY, ALL ANNEXATIONS SUBSEQUENT TO SEPTEMBER 14, 1989, WILL NOT HAVE AN IMPACT UPON THE WATER DISTRIBUTION PROVIDED BY THE DISTRICT.

US EPA RESPONSE: US EPA BELIEVES THAT THIS ISSUE DEPENDS ON THE PROPER INTERPRETATION OF SECTION 60.79(2)(B), WISCONSIN STATUTES. IN ORDER FOR THE TOWN'S REFERENCE REGARDING ANNEXATION OF TERRITORY CONSTITUTING LESS THAN THE ENTIRE DISTRICT TO BE APPLICABLE, ONE OF TWO CONDITIONS IN SECTION 60.79(2)(B) WISCONSIN STATUTE MUST BE SATISFIED.

1. THE TERRITORY IS SERVED BY THE TOWN SANITARY DISTRICT WITH A WATER SUPPLY OR SEWERAGE SYSTEM; OR
2. THE TERRITORY IS NOT SERVED BY THE TOWN SANITARY DISTRICT WITH A WATER SUPPLY OR SEWERAGE SYSTEM, BUT THE DISTRICT HAS OBLIGATIONS RELATED TO THE TERRITORY SUBJECT TO INCORPORATION OR ANNEXATION WHICH REQUIRE PAYMENT FOR LONGER THAN ONE YEAR FOLLOWING THE INCORPORATION OR ANNEXATION.

NEITHER US EPA NOR HALLIE IS CAPABLE OF DETERMINING THE APPLICABILITY OR PROPER INTERPRETATION OF THIS SECTION OF WISCONSIN LAW. THE INTERPRETATION MAY ULTIMATELY BE MADE BY THE WISCONSIN COURTS IF IT CONTINUES TO BE AN ISSUE BETWEEN THE DISTRICT AND CITY OF EAU CLAIRE.

#### COST

COMMENT: SEVERAL COMMENTS STATE THE PREFERRED REMEDY RESULTS IN DUPLICATION OF CAPITAL INVESTMENT AND WOULD BE MORE COSTLY THAN OTHER ALTERNATIVES TO IMPLEMENT, COSTING NEARLY \$1 MILLION MORE IN CAPITAL COSTS THAN THE EXTENSION OF WATER BY EAU CLAIRE. SOME DUPLICATION OF SERVICES (PIPING AND APPURTENANCES) IS NECESSARY TO ACCOMMODATE TWO WATER SYSTEMS WITHIN THE AFFECTED AREA. DUPLICATE SUPPLY AND STORAGE FACILITIES, WHICH ARE ALREADY IN PLACE IN THE EAU CLAIRE SYSTEM, ACCOUNT FOR THE LARGEST PERCENTAGE OF THE COST DIFFERENTIAL BETWEEN EAU CLAIRE SERVING THE ENTIRE AFFECTED AREA AND THE PREFERRED ALTERNATIVE. ONE COMMENTOR ADDED THAT COST IS ONE OF THE "PRIMARY BALANCING CRITERIA" PROPOSED BY US EPA IN CONNECTION WITH THE DEVELOPMENT AND SCREENING OF REMEDIAL ALTERNATIVES.

US EPA RESPONSE: US EPA ACKNOWLEDGES THE HIGHER COSTS ASSOCIATED WITH THE SELECTED REMEDY. AS THE COMMENTORS STATED, THE LARGEST PERCENTAGE OF THE INCREASED COSTS ARE FOR DUPLICATION OF SERVICES ALREADY AVAILABLE THROUGH EAU CLAIRE; CONSTRUCTION OF THE SUPPLY WELL, STORAGE FACILITIES AND LAYING PIPE ACROSS THE AFFECTED AREA. COST IS ONLY ONE OF THE CRITERIA THAT IS EVALUATED DURING THE DETAILED ANALYSIS OF ALTERNATIVES. OTHER PARTICULARLY RELEVANT CRITERIA TO THIS SITUATION ARE IMPLEMENTABILITY, COMMUNITY ACCEPTANCE AND STATE ACCEPTANCE. COST LATER BECOMES ONE OF THE PRIMARY BALANCING CRITERIA CONSIDERED DURING SELECTION OF A FINAL ALTERNATIVE. IMPLEMENTABILITY IS ALSO ONE OF THE PRIMARY BALANCING CRITERIA FOR THIS REMEDY SELECTION STEP.

AS A RESULT OF THE JUNE 13, 1990 PSC ORDER WHICH AUTHORIZES THE DISTRICT TO CONSTRUCT AND OPERATE AS A WATER DISTRICT UTILITY IN THE AFFECTED AREA, THE SELECTED REMEDY IS THE ONLY IMPLEMENTABLE ALTERNATIVE, AND THEREFORE THE MOST COST EFFECTIVE. IN THE ABSENCE OF ANNEXATION, EAU CLAIRE IS UNABLE TO SERVICE THE AFFECTED AREA BECAUSE IT DOES NOT HAVE THE REQUIRED AUTHORIZATION FROM THE PSC. THE DUPLICATION OF SERVICES AND INCREASED CAPITAL INVESTMENT NECESSARY TO IMPLEMENT THE SELECTED REMEDY IS THE RESULT OF PORTIONS OF THE AFFECTED AREA ANNEXING TO EAU CLAIRE.

COMMENT: SEVERAL COMMENTORS BELIEVE THE PREFERRED REMEDY IS INEFFICIENT AND MORE COSTLY TO OPERATE. IN ADDITION TO HIGHER CAPITAL EXPENDITURES, THE PREFERRED REMEDY WOULD RESULT IN HIGHER OPERATIONAL AND ADMINISTRATIVE COSTS.

US EPA RESPONSE: US EPA DISAGREES WITH THE STATEMENT THAT THE PREFERRED REMEDY IS INEFFICIENT. THE SELECTION OF THE PREFERRED REMEDY WAS PREDICATED ON THE CONCEPT OF AN IMPLEMENTABLE AND COMMUNITY-ACCEPTED ALTERNATIVE THAT PROTECTS PUBLIC HEALTH. EACH OF THE ALTERNATIVES, INCLUDING EAU CLAIRE'S PROPOSAL TO SERVICE THE AFFECTED AREA WITHOUT REQUIRING ANNEXATION, MAY PROVIDE PROTECTION OF PUBLIC HEALTH AND BE MORE COST EFFECTIVE; HOWEVER, THE SELECTED REMEDY IS THE ONLY EFFICIENT SOLUTION BECAUSE IT IS THE ONLY IMPLEMENTABLE ALTERNATIVE.

US EPA AGREES WITH THE COMMENTORS ON THE HIGHER OPERATION AND MAINTENANCE COSTS ASSOCIATED WITH THE PREFERRED REMEDY; HOWEVER, THESE COSTS HAD NO BEARING ON THE SELECTION OF THE PREFERRED AND FINAL REMEDIES BECAUSE OPERATION AND MAINTENANCE COSTS WILL BE THE RESPONSIBILITY OF THE CUSTOMERS OF THE RESPECTIVE WATER SYSTEMS. EVERY EFFORT HAS BEEN MADE TO PROVIDE ACCURATE INFORMATION TO THE RESIDENCES AND BUSINESSES WITHIN THE AFFECTED AREA. THE INITIAL 45-DAY PUBLIC COMMENT PERIOD WAS EXTENDED TO 60 DAYS TO ACCOMMODATE THE PSC HEARING, THEREBY ALLOWING FURTHER EVALUATION OF EAU CLAIRE'S PROPOSAL TO SERVICE THE AREA WITHOUT REQUIRING ANNEXATION, INCLUDING COST COMPARISONS BETWEEN THE ALTERNATIVES. THE RESPONSIBILITY OF INTERPRETING THE INFORMATION AND ASSESSING THE DISTRICT'S FINANCIAL IMPACT ON THE TOWN OF HALLIE RESTS WITH THE DISTRICT AND ITS PATRONS.

FOLLOWING THE PSC HEARING ON FEBRUARY 19, 1990, THE DISTRICT CONTINUED TO RECEIVE OVERWHELMING SUPPORT. THERE IS AN APPARENT WILLINGNESS ON THE PART OF HALLIE RESIDENTS TO PAY OPERATION AND MAINTENANCE COSTS THAT ARE HIGHER THAN THOSE IN EAU CLAIRE.

#### COMMUNITY ACCEPTANCE AND IMPLEMENTABILITY

COMMENT: NPI REAFFIRMED THE IMPORTANCE OF COMMUNITY ACCEPTANCE AS A FACTOR IN THE SELECTION PROCESS. COMMUNITY ACCEPTANCE ENCOMPASSES FAR MORE THAN A SIMPLE POLLING OF THOSE DIRECTLY AFFECTED BY THE REMEDY.

WIDESPREAD COMMUNITY ACCEPTANCE FOR THE PREFERRED REMEDY DOES NOT EXIST. BOTH CHIPPEWA FALLS AND EAU CLAIRE FORMALLY OPPOSE THE PREFERRED REMEDY. FINALLY, THE ON-GOING ANNEXATION REQUESTS INDICATE SOME OPPOSITION TO THE PREFERRED REMEDY BY THOSE DIRECTLY AFFECTED BY IT. THERE IS WIDESPREAD COMMUNITY CONCERN, NOT ACCEPTANCE, REGARDING THE PREFERRED REMEDY. THE HALLIE SANITARY DISTRICT IS CLEARLY CONTRARY TO EXPRESSED WISHES OF THE AREA-WIDE COMMUNITY.

US EPA RESPONSE: NPI IS CORRECT IN STATING THE IMPORTANCE OF COMMUNITY ACCEPTANCE IN THE REMEDY SELECTION PROCESS. AS DEFINED IN THE NATIONAL CONTINGENCY PLAN (NCP), COMMUNITY ACCEPTANCE INCLUDES "DETERMINING WHICH COMPONENTS OF THE ALTERNATIVES INTERESTED PERSONS IN THE COMMUNITY SUPPORT, HAVE RESERVATIONS ABOUT OR OPPOSE."

ON PAGE 2 OF NPI'S MAY 5, 1989 RESPONSE TO US EPA'S APRIL 25, 1989 ISSUANCE OF A UNILATERAL ORDER, NPI STATES:

"ONLY THE TOWN CAN DECIDE IF IT WILL HAVE A MUNICIPAL WATER SYSTEM AND, IF SO, WHAT TYPE. EPA AND WDNR ADMIT THAT NO FEDERAL OR STATE AGENCY HAS THE AUTHORITY TO FORCE THE TOWN TO ALLOW A MUNICIPAL WATER SYSTEM AND THAT NPI LACKS BOTH THE NECESSARY CONDEMNATION POWERS AND STATUTORY STANDING TO OPERATE AND MAINTAIN A MUNICIPAL UTILITY SYSTEM WITHIN THE TOWN."

ON PAGE 19 AND 20 OF THE SAME RESPONSE, NPI FURTHER STATES: "BOTH EXISTING AND PROPOSED EPA REGULATIONS REQUIRE EPA TO TAKE INTO ACCOUNT LOCAL INTERESTS AND CONCERNS....EPA IS REQUIRED, TO THE EXTENT PRACTICABLE, TO BE SENSITIVE TO LOCAL COMMUNITY CONCERNS...."

"THE IMPORTANCE OF LOCAL CONCERNS AND INTERESTS IS REAFFIRMED AND STRENGTHENED IN THE EPA'S PROPOSED MODIFICATIONS TO THE NATIONAL CONTINGENCY PLAN....EPA HAS EMPHASIZED THAT IT STRONGLY BELIEVES THAT COMMUNITY RELATIONS IS AN INTEGRAL PART OF THE SUPERFUND PROGRAM....IN DEVELOPMENT AND SCREENING OF REMEDIAL ALTERNATIVES, COMMUNITY ACCEPTANCE IS ONE OF THE MODIFYING CRITERIA DESIGNATED BY THE EPA....FURTHER, THE EPA

RECOGNIZES IMPLEMENTABILITY AS ONE OF THE PRIMARY BALANCING CRITERIA IN CHOOSING AMONG ALTERNATIVES."

"IN THIS CASE, A MUNICIPAL WATER SUPPLY ALTERNATIVE SIMPLY IS NOT IMPLEMENTABLE WITHOUT TOWN COOPERATION. ONLY THE TOWN CAN ULTIMATELY DECIDE TO ESTABLISH A MUNICIPAL WATER SUPPLY SYSTEM. THE ORDER IGNORES THIS CRITICAL REALITY."

US EPA AGREES WITH THE COMMENTOR'S MAY 5, 1989 ASSERTION OF THE IMPORTANCE OF COMMUNITY ACCEPTANCE AND IMPLEMENTABILITY AND HAS INTEGRATED THESE EVALUATION CRITERIA, AS REQUIRED BY THE NCP, INTO THE REMEDY SELECTION PROCESS.

THE OPPOSITION OF EAU CLAIRE AND CHIPPEWA FALLS, AS GOVERNMENTAL UNITS, TO THE DISTRICT ARE OBVIOUS BECAUSE IT INFRINGES ON THE ABILITY OF THE TWO MUNICIPALITIES TO MANAGE GROWTH AND DEVELOPMENT IN HALLIE. TO CONCLUDE, AS THE COMMENTOR DOES, THAT THIS LIMITATION "WILL LIKELY LEAD TO UNORDERLY DEVELOPMENT AND URBAN SPRAWL" IS A SUBJECTIVE STATEMENT THAT ASSUMES THE TOWN OF HALLIE WILL NOT INSTITUTE PLANNING PRACTICES TO MANAGE GROWTH AND DEVELOPMENT WITHIN THE TOWN.

NO COMMENTS WERE RECEIVED FROM RESIDENTS OF EAU CLAIRE OR CHIPPEWA FALLS; THEREFORE, US EPA CANNOT GAUGE THE INTEREST OR DEGREE OF ACCEPTANCE BY THE GENERAL PUBLIC IN THESE TWO CITIES. HOWEVER, US EPA ACKNOWLEDGES THAT THE MUNICIPALITIES' POSITION MAY REFLECT THE POSITIONS OF AT LEAST SOME OF THE RESIDENTS OF EAU CLAIRE AND CHIPPEWA FALLS.

OVER 100 COMMENTS, WRITTEN AND ORAL, WERE RECEIVED BY US EPA DURING THE PUBLIC COMMENT PERIOD. THE MAJORITY OF THE COMMENTS WERE FROM RESIDENCES AND BUSINESSES IN HALLIE. ORAL COMMENTS INCLUDED THOSE ACCEPTED AT THE JANUARY 18, 1990 US EPA PUBLIC MEETING, AND AT THE FEBRUARY 19, 1990 PSC HEARING TO ACCEPT PUBLIC COMMENTS ON THE PROPOSED TOWN SANITARY DISTRICT. WRITTEN COMMENTS WERE RECEIVED BETWEEN JANUARY 4, 1990 AND MARCH 5, 1990 AND ARE PART OF THE ADMINISTRATIVE RECORD FOR THE SITE.

US EPA ACKNOWLEDGES THAT SOME COMMENTS EXPRESSED OPPOSITION TO THE PREFERRED ALTERNATIVE; HOWEVER, BASED ON THE COMMENTS RECEIVED, APPROXIMATELY 67 PERCENT OF THE AFFECTED AREA SUPPORTS THE DISTRICT. OUTSIDE THE AFFECTED AREA, SUPPORT IS EVEN HIGHER, 78 PERCENT. US EPA STRONGLY DISAGREES WITH THE COMMENTORS' STATEMENT THAT THE DISTRICT IS "CLEARLY CONTRARY TO EXPRESSED WISHES OF THE AREA-WIDE COMMUNITY."

COMMENT: SEVERAL COMMENTORS POINTED OUT THAT THE PREFERRED REMEDY HAS SIGNIFICANT IMPLEMENTATION PROBLEMS. ON-GOING ANNEXATIONS COMPLICATE THE ABILITY TO SERVE THE AFFECTED AREA BY CONTINUALLY CHANGING BOUNDARIES. EXISTING LITIGATION REGARDING ANNEXATIONS AND THE DISTRICT'S SERVICE BOUNDARIES MAY MAKE TIMELY DESIGN AND CONSTRUCTION DIFFICULT. A JURISDICTION CANNOT PROVIDE WATER TO AN AREA NO LONGER IN ITS BOUNDARIES SIMPLY BECAUSE US EPA HAS ELECTED TO FREEZE BOUNDARIES ON A SPECIFIC DATE. FOR EXAMPLE, THE DISTRICT WILL NOT BE ABLE TO PROVIDE WATER TO THOSE AREAS WHICH HAVE BEEN ANNEXED TO EAU CLAIRE. MOREOVER, THE PREFERRED REMEDY IGNORES THE POSSIBILITY THAT THE DISTRICT WILL NOT RECEIVE THE NECESSARY APPROVALS, NAMELY PSC AUTHORIZATION.

ON THE OTHER HAND, EAU CLAIRE'S ALTERNATIVE IS READY TO BE IMPLEMENTED. IT DOES NOT NEED PSC APPROVAL BECAUSE IT IS MERELY AN EXTENSION OF EXISTING WATER MAINS. TO THE EXTENT THE TOWN REFUSES TO AUTHORIZE CONSTRUCTION OF WATER MAINS IN ITS ROAD RIGHT-OF-WAYS, THE CITY CAN SEEK APPROVAL FROM THE TRANSPORTATION COMMISSIONER PURSUANT TO WISCONSIN STATUTES.

MOREOVER, EAU CLAIRE POSSESSES THE STATUTORY AUTHORITY TO CONDEMN LANDS FOR PURPOSES OF LAYING WATER LINES. THE EAU CLAIRE ALTERNATIVE IS THE MOST EXPEDIENT METHOD AND SHOULD BE THE PREFERRED REMEDY. IT PROVIDES A PERMANENT WATER SUPPLY TO THE AFFECTED AREA IN THE MOST EXPEDITIOUS, RELIABLE, COST EFFECTIVE AND ENVIRONMENTALLY SOUND FASHION.

US EPA RESPONSE: THE COMMENTORS ARE NOT DIFFERENTIATING BETWEEN THE PREFERRED REMEDY AND FINAL REMEDY. US EPA IMPOSED A TEMPORARY "FREEZE" ON JURISDICTIONAL BOUNDARIES IN THE AFFECTED AREA IN OCTOBER 1989 FOR PURPOSES OF IDENTIFYING ONLY A PREFERRED ALTERNATIVE. AT THAT TIME, US EPA RECOGNIZED THAT FUTURE ANNEXATIONS TO EAU CLAIRE MAY REQUIRE A REEVALUATION OF ALTERNATIVES PRIOR TO US EPA SELECTING A FINAL REMEDY. THE SELECTED REMEDY CONFORMS WITH STATE LAW BY PROVIDING FOR EAU CLAIRE TO SERVICE THOSE PORTIONS OF THE AFFECTED AREA THAT HAVE ANNEXED TO EAU CLAIRE.

US EPA FULLY ACKNOWLEDGED THE ROLE OF THE PSC IN THE PROPOSED PLAN AND WITHHELD AGENCY DECISION ON THE FINAL REMEDY UNTIL THE PSC ORDER WAS ISSUED ON JUNE 13, 1990. UNDER THE PSC ORDER, EAU CLAIRE'S ALTERNATIVE (ALTERNATIVE 6) IS NO LONGER IMPLEMENTABLE. EAU CLAIRE ONLY HAS THE AUTHORITY TO EXTEND WATER SERVICE TO THOSE PORTIONS OF THE AFFECTED AREA THAT HAVE ANNEXED TO EAU CLAIRE. EAU CLAIRE CANNOT PROVIDE MUNICIPAL WATER TO THE DISTRICT BECAUSE THE PSC ORDER GRANTS THAT AUTHORITY TO THE DISTRICT. THE DUAL SERVICE ALTERNATIVE, WHICH RESULTS IN THE DUPLICATION OF SERVICES, IS THE ONLY IMPLEMENTABLE ALTERNATIVE. SERVICE DUPLICATION AND IMPLEMENTATION COSTS INCREASE WITH CONTINUED ANNEXATIONS OF THE AFFECTED AREA BY EAU CLAIRE.

ANY ANNEXATION IN THE AFFECTED AREA THAT IS THE SUBJECT OF A DISPUTE OR LITIGATION BETWEEN THE CITY OF EAU CLAIRE AND THE DISTRICT WITH RESPECT TO WHICH GOVERNING BODY HAS THE AUTHORITY TO PROVIDE SERVICES, MAY JEOPARDIZE THE IMPLEMENTATION OF A REPLACEMENT WATER SUPPLY FOR THE DISPUTED PARCEL UNTIL THE DISPUTE IS RESOLVED. OTHER THAN ANY OUTSTANDING DISPUTES OR LITIGATION, THE SELECTED REMEDY IS IMPLEMENTABLE AND SHOULD PROCEED FORWARD WITH DESIGN AND CONSTRUCTION.

ONE OF THE COMMENTOR'S DISCUSSION OF MEANS BY WHICH EAU CLAIRE CAN SEEK APPROVAL UNDER STATE LAW TO INSTALL WATER MAINS IN TOWN ROAD RIGHT-OF-WAYS IS NO LONGER AN ISSUE UNDER EITHER THE PREFERRED OR SELECTED REMEDIES. TO FULLY EVALUATE THESE ISSUES, US EPA SOUGHT INPUT FROM THE WISCONSIN DEPARTMENT OF JUSTICE (WDOJ) AND THE WISCONSIN DEPARTMENT OF TRANSPORTATION (WDOT). THE COMMENTOR IS REFERRED TO THE ADMINISTRATIVE RECORD FOR OPINIONS RENDERED BY WDOJ AND WDOT.

#### GENERAL COMMENTS

COMMENT: SEVERAL COMMENTORS ASSERT THAT THE PREFERRED ALTERNATIVE IS INCONSISTENT WITH EXISTING LAND USE AND REGIONAL PLANS AND WOULD FOSTER UNORDERLY DEVELOPMENT WITH ITS ATTENDANT ENVIRONMENTAL IMPACTS. CONSISTENT WITH THE URBAN PLANNING PROCESS, SEWER AND WATER FACILITIES IN BOTH EAU CLAIRE AND CHIPPEWA FALLS HAVE BEEN PLANNED AND SIZED TO PROVIDE EVENTUAL SERVICE TO WHAT IS NOW THE DISTRICT.

THE CREATION OF A SINGLE PURPOSE SANITARY DISTRICT IS CONTRARY TO SOUND PLANNING AND WOULD NOT EVEN BE A CONSIDERATION BUT FOR THE UNILATERAL ORDER. IT APPEARS TO BE THE OBJECTIVE OF THE PROPOSAL TO CREATE A SINGLE PURPOSE DISTRICT TO LEVERAGE SECOND PARTY MONEY, REQUIRED TO SERVE THE AFFECTED AREA, WHICH WILL EXTEND SERVICE TO AREAS WHICH WOULD NOT OTHERWISE WARRANT THE INVESTMENT. THE CREATION OF A SANITARY DISTRICT WITH MULTIPLE ADDITIONS HAS COME ABOUT SOLELY DUE TO THE AVAILABILITY OF FEDERAL FUNDS.

US EPA RESPONSE: THE EAU CLAIRE LAND USE PLAN REFERENCED IN THE COMMENTORS' SUBMITTAL, WAS PREPARED BY THE CITY BETWEEN 1979 AND 1982, AND UPON ITS APPROVAL IN 1982, BECAME THE OFFICIAL PLANNING DOCUMENT FOR DEVELOPMENT WITHIN THE CITY LIMITS. THIS PLAN ALSO CONTAINS "RECOMMENDATIONS" FOR UNINCORPORATED AREAS WITHIN AND ADJACENT TO THE EAU CLAIRE URBAN AREA; HOWEVER, THE RECOMMENDATIONS ARE NOT PART OF THE OFFICIAL LAND USE PLAN. THE PLAN INDICATES A DESIRE TO ENTER INTO JOINT PLANNING EFFORTS WITH THE EAU CLAIRE AND CHIPPEWA FALLS URBAN AREAS, BUT FURTHER STATES; "IF REASONABLE EFFORTS ARE NOT SUCCESSFUL, THE CITY'S IMPLEMENTATION EFFORTS WILL NEED TO BE REVIEWED AND ADJUSTED ACCORDINGLY."

THE CHIPPEWA FALLS - EAU CLAIRE URBAN AREA PLAN, 1975-2000 (URBAN AREA PLAN) WAS PREPARED BY THE WEST CENTRAL WISCONSIN REGIONAL PLANNING COMMISSION (WCWRPC). WCWRPC IS COMPRISED OF REPRESENTATIVES FROM THE MEMBER COUNTIES AND SERVES IN AN ADVISORY ROLE TO LOCAL GOVERNMENT UNITS. THE PLAN WAS FORMALLY APPROVED BY THE METROPOLITAN AREA PLANNING ADVISORY COMMITTEE IN 1976.

THE URBAN AREA PLAN SETS GOALS THAT ARE APPLICABLE TO AND CONSISTENT WITH GENERAL REGIONAL PLANNING DOCUMENTS FOR ANY URBAN AREA INCLUDING: PROVIDING FOR SERVICES ECONOMICALLY, PRESERVATION OF NATURAL RESOURCES, GROWTH OF THE URBAN AREA AS A UNIT AND NOT AS DISTINCT GOVERNMENTAL AND POLITICAL UNITS, DEVELOPING A WELL-BALANCED AND SOUND ECONOMY AS ITS FOUNDATION, AND ENERGY-EFFICIENT DEVELOPMENT. THESE ARE SOUND PLANNING PRINCIPLES DESIGNED TO MAXIMIZE THE ORDERLY AND EFFICIENT GROWTH OF AN URBAN AREA. THERE IS NO DENYING THAT FROM A PRACTICAL, ECONOMIC AND PLANNING PERSPECTIVE, URBAN SERVICES CAN PROBABLY BE MORE EFFICIENTLY PROVIDED TO THE AFFECTED AREA BY EXISTING AND PROVEN FACILITIES.

THE REGIONAL PLANNING DOCUMENTS REFERENCED ABOVE ARE OUTDATED AND CERTAINLY DID NOT CONTEMPLATE THE FUTURE EXISTENCE OF A SANITARY DISTRICT TO PROVIDE URBAN SERVICES TO THE TOWN OF HALLIE, SERVICES PRESUMED TO BE PROVIDED AT SOME POINT BY EAU CLAIRE AND CHIPPEWA FALLS. ADDITIONALLY, IT IS DIFFICULT FOR REGIONAL PLANS TO



FACTOR HISTORICAL RELATIONSHIPS BETWEEN ADJOINING COMMUNITIES, A CRITICAL AND UNPREDICTABLE ELEMENT OF LONG RANGE PLANNING AND PARTICULARLY RELEVANT IN THIS SITUATION.

ONE OF THE COMMENTORS, NPI, HAS PREVIOUSLY RECOGNIZED THE NEED FOR SENSITIVITY TO THE HISTORIC DIFFERENCES AND EMOTIONAL REALITIES BETWEEN THE TOWN OF HALLIE AND CITY OF EAU CLAIRE. NPI FURTHER RECOGNIZED THE IMPORTANCE OF THE TOWN'S INITIATIVES AND OBJECTIVES IN THE REMEDY EVALUATION AND SELECTION PROCESS BY STATING THE FOLLOWING IN ITS MAY 5, 1989 RESPONSE TO THE UNILATERAL ORDER ISSUED BY US EPA:

"THE TOWN HAS EMBARKED UPON A TWO-PRONGED INITIATIVE TO: (1) EVALUATE THE POLITICAL INTEGRITY OF THE EXISTING TOWNSHIP; AND (2) TO DETERMINE THE BEST WAY TO PROVIDE CERTAIN MUNICIPAL SERVICES TO ITS MORE URBANIZED AREA."

"THE EPA AND NPI MUST BE SENSITIVE TO THE TWIN OBJECTIVES OF THE TOWN TO MAINTAIN ITS POLITICAL INTEGRITY AND PROVIDE MUNICIPAL SERVICES SOUGHT BY ITS TAXPAYERS. THE TOWN IS IN A FRAGILE POLITICAL POSITION BEING LOCATED BETWEEN TWO GROWING MUNICIPALITIES. THE TRANSPORTATION CORRIDOR BETWEEN THOSE TWO MUNICIPALITIES PROVIDES AN IDEAL SETTING FOR COMMERCIAL AND LIGHT INDUSTRIAL DEVELOPMENT AND AN INCREASED DEMAND FOR MUNICIPAL SERVICES SUCH AS MUNICIPAL WATER. OTHER PORTIONS OF THE TOWN ARE PRIME AREAS FOR DEVELOPMENT AS SUBURBAN BEDROOM COMMUNITIES AND, AS A RESULT, ARE ATTRACTIVE ANNEXATION TARGETS FOR THE ADJOINING CITIES."

"THUS THE "AFFECTED AREA" WHICH IS THE SUBJECT OF THE ORDER REPRESENTS JUST ONE PORTION OF A LARGER GEOGRAPHIC AREA TO WHICH THE TOWN NEEDS TO PROVIDE MUNICIPAL SERVICES. THE TOWN CANNOT AFFORD TO SEGREGATE THE DISCUSSION OF WATER PROBLEMS IN THE "AFFECTED AREA" FROM WATER PROBLEMS IN OTHER SECTIONS OF THE TOWN. THE TOWN MUST ADDRESS THE BROADER CONSIDERATIONS IN ORDER TO REACH A POLITICALLY AND ECONOMICALLY VIABLE SOLUTION. THEREFORE, TO ACHIEVE THE TOWN'S OBJECTIVES, THE TECHNICAL AND POLITICAL INVESTIGATION OF THE AFFECTED AREA MUST BE COORDINATED AS PART OF THE TOWN'S OVERALL OBJECTIVES."

IN A MARCH 21, 1989 LETTER TO US EPA, NPI STATED THE FOLLOWING:

"...NEITHER THE EPA, DNR NOR ANY PRIVATE THIRD PARTY HAS THE AUTHORITY, INDIVIDUALLY OR COLLECTIVELY, TO ESTABLISH IN THE TOWN OF HALLIE A MUNICIPAL WATER SUPPLY SYSTEM. UNDER FEDERAL AND STATE LAW, THE AUTHORITY TO TAKE THIS ACTION IS VESTED SOLELY WITH RESIDENTS OF THE TOWNSHIP. THE DECISION WHETHER TO ESTABLISH A PUBLIC MUNICIPAL WATER DISTRICT OR SEEK A PERMANENT WATER SUPPLY FROM SOME OTHER SOURCE, IS A DECISION THAT ONLY THE TOWN OF HALLIE CAN MAKE. NO ONE CAN MAKE THAT DECISION FOR THE TOWNSHIP. CONSEQUENTLY, IT FOLLOWS THAT THE TOWN OF HALLIE POLITICAL PROCESS MUST BE ALLOWED TO OPERATE FREELY WITHOUT UNDUE INFLUENCE FROM EXTERNAL GOVERNMENT OR PRIVATE INTERESTS, WHOEVER THEY MAY BE."

US EPA AGREES WITH NPI ON THE IMPORTANCE OF THESE ISSUES AND FACTORED THEM INTO THE AGENCY'S DECISION ON THE PREFERRED AND SELECTED REMEDIES.

US EPA STRONGLY DISAGREES WITH THE ASSERTION THAT THE DISTRICT IS THE DIRECT RESULT OF THE UNILATERAL ORDER AND THE AVAILABILITY OF FEDERAL FUNDS. FIRST OF ALL, IT IS US EPA'S INTENTION TO PURSUE THE RESPONSIBLE PARTY(IES) FOR THE FUNDING OF THE SELECTED REMEDY. SECONDLY, THE AVAILABILITY OF THIRD PARTY FUNDS MAY HAVE BEEN A FACTOR IN THE CREATION OF THE DISTRICT; HOWEVER, US EPA CANNOT STATE THERE IS A DIRECT RELATIONSHIP BETWEEN THE DISTRICT'S GROWTH AND THE AVAILABILITY OF FUNDS BECAUSE THE FINANCIAL OBLIGATION OF EXTENDING WATER SERVICE BEYOND THE AFFECTED AREA RESTS WITH THE USERS OF THE SYSTEM. THE AVAILABILITY OF THIRD PARTY FUNDS WAS ALSO A FACTOR IN EAU CLAIRE'S DECISION TO PROVIDE WATER TO THE AFFECTED AREA WITHOUT REQUIRING ANNEXATION AS STATED IN THE RESOLUTION ADOPTED BY THE EAU CLAIRE CITY COUNCIL ON FEBRUARY 13, 1990.

TO CONCLUDE, AS SEVERAL COMMENTORS DO, THAT THE DISTRICT WOULD ENCOURAGE AN URBAN SPRAWL PATTERN OF DEVELOPMENT IS A SUBJECTIVE STATEMENT THAT ASSUMES THE TOWN OF HALLIE WILL NOT INSTITUTE PLANNING PRACTICES TO MANAGE GROWTH AND DEVELOPMENT WITHIN THE TOWN. ECONOMICS MAY ULTIMATELY DRIVE THE ABILITY OF THE DISTRICT TO SERVE ADDITIONS TO THE DISTRICT BEYOND THE AFFECTED AREA. FURTHERMORE, US EPA QUESTIONS THE VALIDITY OF THIS COMMENT WHEN ONE OBSERVES THE ANNEXATION TENDENCIES OF EAU CLAIRE IN THE AFFECTED AREA.

THE UNILATERAL ORDER REQUIRED NPI TO EVALUATE POTENTIAL ALTERNATIVES FOR A PERMANENT WATER SUPPLY FOR THE AFFECTED AREA THAT PROTECTS PUBLIC HEALTH. IT DID NOT SET THE FRAMEWORK FOR CREATING A SANITARY DISTRICT. THE DISTRICT WAS CREATED IN RESPONSE TO EAU CLAIRE'S UNWILLINGNESS TO SERVE THE AFFECTED AREA WITHOUT FIRST

REQUIRING ANNEXATION. AT THE TIME OF FORMATION, THE DISTRICT COMPRISED ONLY THE AFFECTED AREA WITH THE EXCEPTION OF ONE SMALL ADDITION OUTSIDE THE AFFECTED AREA. THE GROWTH OF THE DISTRICT TO ITS PRESENT SIZE WAS DUE TO THE INTEREST AND DESIRE OF OTHER HALLIE RESIDENTS TO BE PART OF A WATER DISTRICT UTILITY AND HAD NO BEARING ON US EPA'S SELECTION OF THE FINAL REMEDY.

COMMENT: NPI SPECIFICALLY TAKES EXCEPTION TO US EPA'S PROPOSED PLAN AND THE PFS ADDENDUM WITH RESPECT TO THE FOLLOWING MATTERS:

1. EPA STATEMENT THAT "...NPI HAS BEEN, AND CONTINUES TO BE, UNWILLING TO ACCURATELY PRESENT INFORMATION TO EITHER THE PUBLIC OR US EPA THAT IMPLICATES CONFIRMED ON-SITE DISPOSAL AREAS AS SOURCES OF OFF-SITE CONTAMINATION."
2. US EPA ALLEGATIONS THAT REPRESENTATIONS BY NPI AND ITS CONSULTANTS IN THE PFS WERE MISLEADING AND BIASED, AND
3. US EPA ALLEGATIONS THAT THE PFS CONTAINS UNWARRANTED EDITORIALIZING OR SPECULATION BY NPI AND ITS CONSULTANTS.

THE COMMENTOR RESPECTFULLY REQUESTS THAT THE US EPA ADDENDUM AND PROPOSED PLAN BE REVISED TO DELETE REFERENCE TO THE MATTERS SPECIFICALLY EXCEPTED TO BY THE COMMENTOR AS SET FORTH IN SECTION III B.1, 2. AND 3. ABOVE.

US EPA RESPONSE: US EPA NOTES THESE COMMENTS FOR INCLUSION INTO THE ADMINISTRATIVE RECORD. WITHOUT SPECIFICALLY RESPONDING TO ITEMS 1., 2. AND 3. ABOVE, AND THE TWO PAGES OF NARRATIVE IMMEDIATELY FOLLOWING IN NPI'S MARCH 5, 1990 SUBMITTAL, THE AGENCY STANDS BEHIND THE ADDENDUM TO THE PFS AND BELIEVES THE ADMINISTRATIVE RECORD FULLY SUPPORTS THE STATEMENTS AND CONCLUSIONS CONTAINED THEREIN. US EPA RESPECTFULLY DECLINES TO REVISE THE PROPOSED PLAN IN RESPONSE TO THE EXCEPTIONS TAKEN BY NPI.

US EPA DOES AGREE WITH SOME OF THE TECHNICAL COMMENTS SUBMITTED BY EDER ASSOCIATES IN ITS MARCH 1, 1990 LETTER, AND THESE ARE INCORPORATED INTO THE ADDENDUM BY REFERENCE WITH QUALIFICATIONS NOTED BY US EPA. REFER TO SECTION 3.A. OF THIS RESPONSIVENESS SUMMARY FOR US EPA'S RESPONSE TO SPECIFIC COMMENTS FROM EDER ASSOCIATES.

COMMENT: THE CITY OF CHIPPEWA FALLS EMPHASIZED THAT THE DISTRICT WILL CREATE AN ADDITIONAL GOVERNMENTAL UNIT IN THE METROPOLITAN AREA RESULTING IN MORE FRAGMENTATION WHICH CAN COMPLICATE COORDINATED DEVELOPMENT OF THE ENTIRE AREA. LAND USE PLANNING, STREET AND HIGHWAY PLANNING, FACILITIES PLANNING, TO NAME A FEW, DO NOT RESPECT GOVERNMENTAL BOUNDARY LINES. BUT THE DEVELOPMENT, AND MORE PARTICULARLY, THE IMPLEMENTATION OF PLANNING ACTIVITIES BECOMES MUCH MORE DIFFICULT WHERE MANY FRAGMENTED SEPARATE GOVERNMENTAL SYSTEMS EXIST.

US EPA RESPONSE: IT IS BEYOND THE SCOPE OF THE PREFERRED AND SELECTED REMEDIES TO ASSESS THE IMPACT THE DISTRICT MAY OR MAY NOT HAVE ON THE FUTURE GROWTH AND DEVELOPMENT OF THE EAU CLAIRE - CHIPPEWA FALLS URBAN AREA. THE DISTRICT AND TOWN OF HALLIE ARE SYNONYMOUS WITH HALLIE TOWN BOARD MEMBERS ALSO SERVING AS DISTRICT COMMISSIONERS. FOR THIS REASON, US EPA DOES NOT BELIEVE THE DISTRICT WILL SIGNIFICANTLY IMPACT THE ABILITY TO IMPLEMENT REGIONAL PLANNING ACTIVITIES. HOWEVER, LONG-TERM REGIONAL GOALS AND OBJECTIVES MAY HAVE TO BE REVISED TO ACCOUNT FOR THE EXISTENCE OF THE DISTRICT. A MORE SIGNIFICANT BARRIER TO SUCCESSFUL IMPLEMENTATION OF REGIONAL PLANNING ACTIVITIES APPEARS TO BE THE HOSTILITY AND LACK OF COOPERATION BETWEEN EAU CLAIRE AND THE TOWN OF HALLIE.

COMMENT: ONE COMMENTOR BELIEVED THE DISTRICT IS NOT REQUIRED BY THE PUBLIC CONVENIENCE AND NECESSITY. PUBLIC CONVENIENCE AND NECESSITY ARE BETTER SERVED BY THE EXTENSION OF CITY OF EAU CLAIRE WATER TO THE AFFECTED AREA.

US EPA RESPONSE: THE CITY OF EAU CLAIRE OFFERED TO ONLY EXTEND MUNICIPAL WATER TO THE AFFECTED AREA WITHOUT REQUIRING ANNEXATION. IN A MAY 7, 1990 LETTER TO THE CITIES OF EAU CLAIRE AND CHIPPEWA FALLS AND THE TOWN OF HALLIE, THE PSC MADE A PRELIMINARY DETERMINATION THAT THERE IS A NEED FOR A PUBLIC WATER SYSTEM IN THE ENTIRE GEOGRAPHIC AREA OF THE PROPOSED DISTRICT, INCLUDING THE AFFECTED AREA. THE PSC ALSO PROVIDED EAU CLAIRE AND CHIPPEWA FALLS THE OPPORTUNITY "TO BE THE PROVIDER OF WATER UTILITY SERVICE THROUGHOUT THE ENTIRE GEOGRAPHIC AREA OF THE DISTRICT ON AN ESSENTIALLY EQUIVALENT BASIS AS THE DISTRICT PROPOSES WITHOUT THE REQUIRING

ANNEXATION." EAU CLAIRE AND CHIPPEWA FALLS COULD NOT COMPLY WITH THE CONDITIONS ESTABLISHED BY THE PSC AND THE ORDER WAS ISSUED ON JUNE 13, 1990. IN THE ORDER, THE PSC CERTIFIES: "THAT THE GENERAL PUBLIC INTEREST AND PUBLIC CONVENIENCE AND NECESSITY REQUIRE THE TOWN OF HALLIE SANITARY DISTRICT NO. 1, CHIPPEWA COUNTY, TO OPERATE AS A WATER PUBLIC UTILITY...."

COMMENT: THE TOWN OF HALLIE SUBMITTED ITS OWN INTERPRETATION OF THE NINE EVALUATION CRITERIA, EXCLUDING COMMUNITY AND STATE ACCEPTANCE, IN COMPARING THE DISTRICT TO EAU CLAIRE'S PROPOSAL TO EXTEND MUNICIPAL WATER TO THE AFFECTED AREA WITHOUT REQUIRING ANNEXATION.

US EPA RESPONSE: US EPA APPRECIATES THE COMMENTS FROM THE TOWN OF HALLIE AND THANKS THE TOWN AND DISTRICT FOR ITS INTEREST AND SUPPORT THROUGHOUT THE REMEDIAL PROCESS. WITHOUT RESPONDING TO THE APPLICABILITY OF THE TOWN'S COMMENTS RELATIVE TO THE NINE CRITERIA, US EPA DID NOT SELECT EAU CLAIRE'S PROPOSAL (ALTERNATIVE 6) FOR REASONS DETAILED IN THE ROD.

COMMENT: THE CITY OF CHIPPEWA FALLS SUBMITTED RESOLUTION 90-20 REGARDING HALLIE SANITARY DISTRICT NO. 1. PASSED BY THE CITY COUNCIL ON FEBRUARY 26, 1990. THE CITY OF CHIPPEWA FALLS RESOLVES THE FOLLOWING:

1. THAT THE CITY OF CHIPPEWA FALLS HEREBY SUPPORTS THE PROMPT EXTENSION OF WATER TO THE AFFECTED AREA KNOWN AS THE HALLIE TRIANGLE.
2. THAT THE CITY OF CHIPPEWA FALLS FAVORS THE PROPOSAL OF THE CITY OF EAU CLAIRE TO PROVIDE SAFE WATER TO THE HALLIE TRIANGLE AS THE MOST COST-EFFECTIVE SOLUTION.
3. THAT FORMATION OF THE HALLIE SANITARY DISTRICT WITHIN THE ULTIMATE SERVICE AREAS OF THE CITIES OF EAU CLAIRE AND CHIPPEWA FALLS IS REDUNDANT AND NOT COST EFFECTIVE AND PROMOTES URBAN SPRAWL.
4. THAT THE CITY OF CHIPPEWA FALLS HEREBY OPPOSES THE FORMATION OF THE HALLIE SANITARY DISTRICT NO. 1 BASED ON THE ADOPTED SERVICE AREA PLANS AND THE INVESTMENT THAT HAS BEEN ALREADY MADE BY THE CITY OF CHIPPEWA FALLS TO COMPLY WITH THESE PLANS.
5. THAT SEWER AND WATER SERVICE BE PROVIDED TO THE PLANNED ULTIMATE SERVICE AREA IN ACCORDANCE WITH THE APPROVED AREA-WIDE PLANS REFERRED TO ABOVE.
6. THAT THE CITY ATTORNEY IS HEREBY AUTHORIZED AND DIRECTED TO MAKE THIS POSITION KNOWN TO THE ENVIRONMENTAL PROTECTION ADMINISTRATION, THE WISCONSIN PUBLIC SERVICE COMMISSION AND THE HALLIE SANITARY DISTRICT NO. 1 BY THE RESPECTIVE DEADLINE FOR FILING WRITTEN COMMENTS OR BRIEFS WITH THESE AGENCIES.

US EPA RESPONSE: US EPA ACKNOWLEDGES THE RESOLUTION ADOPTED BY THE CITY COUNCIL OF CHIPPEWA FALLS AND APPRECIATES THE INTEREST BY THE CITY IN THE PROMPT IMPLEMENTATION OF AN ALTERNATE WATER SUPPLY FOR THE AFFECTED AREA. US EPA AGREES WITH RESOLUTION NO. 1 AND BELIEVES THE SELECTED REMEDY WILL ACCOMPLISH THIS OBJECTIVE IN A TIMELY MANNER. FOR RESOLUTIONS 2 THROUGH 5, THE CITY IS REFERRED TO OTHER SECTIONS OF THIS RESPONSIVENESS SUMMARY FOR US EPA'S RESPONSE TO THE CITY'S COMMENTS AND CONCERNS.

COMMENT: THE CITY OF EAU CLAIRE QUESTIONS THE LONG-TERM ECONOMIC VIABILITY OF THE DISTRICT. IT IS FURTHER CONCERNED THAT CITIZENS IN THE AREA AND THE CITY MAY INCUR ADDITIONAL COSTS WHEN IT IS NECESSARY TO INCORPORATE AN INDEPENDENTLY-CONSTRUCTED SYSTEM INTO THE CITY'S FACILITIES.

US EPA RESPONSE: THE ROD DOES NOT ADDRESS THE LONG-TERM ECONOMIC VIABILITY OF THE DISTRICT. SINCE OPERATION AND MAINTENANCE COSTS ARE THE RESPONSIBILITY OF THE DISTRICT THROUGH USER FEES, THE RESPONSIBLE PARTIES' FINANCIAL OBLIGATIONS, OR SUPERFUND'S IN THE EVENT THE RESPONSIBLE PARTIES DO NOT IMPLEMENT THE SELECTED REMEDY, ARE FOR DESIGN AND CONSTRUCTION ONLY. US EPA DID NOT SELECT THE FINAL REMEDY UNDER THE PRESUMPTION THAT THE CITY OF EAU CLAIRE WOULD INCORPORATE THE DISTRICT'S FACILITIES INTO THE CITY'S MUNICIPAL WATER SYSTEM AT SOME POINT IN THE FUTURE.

RESPONSES TO COMMENTS SUBMITTED BY EDER ASSOCIATES, INC. (EDER) AND SHORT ELLIOT HENDRICKSON, INC. (SEH)

EDER

COMMENT: THIS COMMENT PERTAINS TO ITEMS 1) AND 3) ON PAGE 1 OF THE ADDENDUM: ONLY DRY WELLS 2 AND 3 CONTAINED VOCS, THEREFORE THE STATEMENT THAT ALL DRY WELLS ARE SOURCES OF VOC CONTAMINATION IS INCORRECT.

US EPA RESPONSE: THE ADDENDUM DOES NOT STATE THAT ALL DRY WELLS ARE SOURCES OF VOC CONTAMINATION. IT SIMPLY STATES THAT DRY WELLS, WITHOUT REFERENCE TO SPECIFIC DRY WELLS, ARE SOURCES OF CONTAMINATION.

COMMENT: THIS COMMENT PERTAINS TO THE MELBY ROAD DISCUSSION ON PAGE 4. THE ANALYTICAL METHOD AND DETECTION LIMITS WERE APPROVED BY US EPA FOLLOWING EXTENSIVE PRE-RI TESTING BY PACE LABORATORIES. VOCS WERE DETECTED AT LAGOON NO. 1 USING THE SAME DETECTION LIMITS. THE IMPLICATION THAT THERE WERE OTHER ANALYTICAL METHODS AVAILABLE THAT WOULD PROVIDE BETTER DETECTION LIMITS IS NOT CORRECT. THE CHARACTERIZATION OF THE DETECTION LIMITS AS BEING UNUSUALLY HIGH IS NOT JUSTIFIED GIVEN THE NATURE OF THE SAMPLE MATRIX.

US EPA RESPONSE: THE INTENT OF THIS PARAGRAPH WAS TO SIMPLY PRESENT AN EXPLANATION FOR THE ABSENCE OF VOCS IN THE ANALYTICAL RESULTS OF SOIL AND WASTE SAMPLES FROM THE MELBY ROAD SITE. IT WAS NOT INTENDED TO IMPLY THE AVAILABILITY OF OTHER ANALYTICAL METHODS WITH LOWER DETECTION LIMITS. THE ANALYTICAL METHOD AND DETECTION LIMITS WERE APPROVED BY US EPA PRIOR TO SAMPLE ANALYSIS.

COMMENT: THIS COMMENT PERTAINS TO THE MELBY ROAD DISCUSSION ON PAGE 5. THE HIGHEST VOC READINGS IN SOIL VAPORS WERE FOUND EAST OF THE TRENCHES AS SHOWN ON THE DRAWING SUBMITTED BY EDER ASSOCIATES TO US EPA. IN FACT, WHEN THE SOIL VAPOR RESULTS SHOWED VERY LOW VOC CONCENTRATIONS OR NON DETECTS OVER THE TRENCHES, ADDITIONAL SAMPLES WERE COLLECTED AT THESE LOCATIONS FOR LABORATORY ANALYSIS. WITH A DETECTION LIMIT OF 1,000 PPB, NO VOCS WERE DETECTED IN THE TRENCH SAMPLES. THEREFORE, THE STATEMENT THAT A STRONG CORRELATION EXISTS BETWEEN THE TRENCHES AND THE DETECTION OF 1,1,1-TRICHLOROETHANE IN SOIL VAPOR SAMPLES IS INCORRECT.

US EPA RESPONSE: US EPA AGREES WITH THE ABOVE COMMENT WHICH WILL SERVE AS THE REVISION TO THE ADDENDUM.

COMMENT: THIS COMMENT REFERS TO TABLE 1 ON PAGE 5. 1,1-DICHLOROETHENE AND 1,1-DICHLOROETHANE WERE NOT ANALYZED IN SOIL SAMPLES AND THE TABLE SHOULD BE CORRECTED TO READ NOT ANALYZED RATHER THAN NOT DETECTED. THE RANGE IN THE CONCENTRATION COLUMN IS MISLEADING IN TWO WAYS. FIRST, THE LOWER END OF THE RANGE SHOULD BE THE DETECTION LIMIT (OR NOT DETECTED) INSTEAD OF "0." SECOND, TO INDICATE THAT A RANGE IS FROM "0" TO "4" PPB WHEN ONLY ONE SAMPLE CONTAINED 4 PPB IS MISLEADING. SUGGESTED REVISIONS TO TABLES 1 AND 2 ARE ATTACHED.

US EPA RESPONSE: US EPA AGREES WITH THE ABOVE COMMENTS WHICH WILL SERVE AS THE REVISION TO THE ADDENDUM.

COMMENT: THIS COMMENT REFERS TO TABLE 2 ON PAGE 6. AS IN THE PRECEDING COMMENT, ONLY ONE SAMPLE CONTAINED TRICHLOROETHENE (AT 18,000 PPB) AND THE REPRESENTATION OF THE RANGE IN CONCENTRATION AS 0-18,000 PPB IS MISLEADING.

US EPA RESPONSE: US EPA AGREES WITH EDER'S COMMENT WHICH WILL SERVE AS THE REVISION TO THE ADDENDUM; HOWEVER "ONLY" SHOULD BE DELETED FROM EDER'S COMMENT.

COMMENT: THIS COMMENT PERTAINS TO THE AFFECTED AREA DISCUSSION ON PAGES 6 AND 7 OF THE ADDENDUM. THE DEPICTION OF THE WEST PLUME (FIGURE 4) IGNORES DATA FROM PRIVATE WELLS ALONG HIGHWAY 53. THESE WELLS CONTAIN TCE AND NOT THE MELBY ROAD FINGERPRINT VOCS (DCE, DCA AND TCA). WELLS CONTAINING ONLY TCE WOULD NOT BE INCLUDED IN THE WEST PLUME. THE EAST PLUME DOES NOT EXTEND TO THE EAST EDGE OF THE WEST PLUME AS SHOWN ON FIGURE 4. HOWEVER, THE ARROWS SHOWING FLOW FROM THE EAST DISPOSAL AREA TO LAKE HALLIE ARE FAIRLY ACCURATE.

IN ORDER TO MORE ACCURATELY SHOW THE PLUMES, RESIDENTIAL WELL AND GROUNDWATER FLOW DATA SHOULD BE CONSIDERED ALONG WITH FINGERPRINT VOCS FROM THE MONITORING WELLS. THIS WOULD SHOW THAT TCE IN WELLS ALONG HIGHWAY 53 AND DOWNGRAIENT IS NOT ORIGINATING FROM MELBY ROAD BECAUSE OF FINGERPRINTING (WRONG VOCS) AND GROUNDWATER FLOW DIRECTION. ALL OF THIS TIES INTO THE DISCUSSION ON PAGE 7 OF THE ADDENDUM CONCERNING THE INVESTIGATION OF OFF-SITE SOURCES ALONG HIGHWAY 53. WHILE THE US EPA DISCUSSION DOES NOT RULE OUT OFF-SITE SOURCES, IT IS LEFT FOR THE READER TO CONCLUDE THAT, SINCE TCE WAS NOT FOUND AT POTENTIAL OFF-SITE SOURCE AREAS, THERE ARE NO OFF-SITE SOURCES LOCATED ALONG HIGHWAY 53. IF FINGERPRINT VOCS AND GROUNDWATER FLOW ARE CONSIDERED, THERE APPEAR TO BE SOURCES OF TCE ALONG HIGHWAY 53.

US EPA RESPONSE: THE AREA REFERENCED BY EDER'S COMMENTS IS IDENTIFIED AS PLUME 4 IN THE DRAFT RI REPORT AND

THE LANGUAGE PROPOSED BY EDER IN ITS DISCUSSION OF PLUME 4 IN THE DRAFT RI IS THE MOST APPROPRIATE RESPONSE TO ITS COMMENT. THE DRAFT RI READS AS FOLLOWS: "THE MAPPING OF PLUME 4 IS BASED ON THE ANOMALOUS TCE OCCURRENCE IN AN AREA WHICH MAY NOT BE RELATED TO THE NPI SITE. THE PRIMARY REASON FOR NOT CONNECTING PLUME 4 WITH THE NPI SITE IS THE NON DETECTION OF TCE IN MW-5A, B, MW-9A, B, MW-8A, MW-14 OR MW-15 WHICH ARE THE CLOSEST UPGRADIENT MONITORING WELLS. MW-8 LIES BETWEEN PLUME 4 AND THE ONLY DOCUMENTED NPI SITE SOURCE OF TCE, THE EAST DISPOSAL SITE. MW-8 IS SCREENED IN THE 75 TO 90 FOOT ZONE AS COMPARED TO PW-98 WHICH IS SCREENED IN A COMPARABLE ZONE AT 93 TO 98 FEET AND CONTAINED 14 UG/L OF TCE. THE POSSIBILITY OF A SLUG RELEASE FROM THE NPI SITE CANNOT BE ENTIRELY RULED OUT."

THE DISCUSSION CONTINUES "...SAMPLES WERE COLLECTED AT FACILITIES ALONG THE EAST SIDE OF HIGHWAY 53 AND ANALYZED FOR VOCs. AT NORTHWEST EQUIPMENT CO., SAMPLES WERE COLLECTED ALONG A DITCH THAT CARRIED WASTEWATER AWAY FROM THE FACILITY. ONE SAMPLE OF SOIL FROM THE DITCH CONTAINED HIGH LEVELS OF BENZENE COMPOUNDS WHICH RESULTED IN HIGH DETECTION LIMITS FOR OTHER VOCs. THE PRESENCE OF TCE AT AN ESTIMATED CONCENTRATION OF 256 UG/KG IS A QUALIFIED RESULT....GIVEN THE NON-VALIDATED NATURE OF THIS RESULT, NO DEFINITIVE STATEMENT CAN BE MADE ON NORTHWEST EQUIPMENT AS A POTENTIAL SOURCE OF TCE."

US EPA WISHES TO ADD THAT THIS IS DRAFT LANGUAGE NOT YET APPROVED BY US EPA AND WDNr. THE IDENTIFICATION OF THE EAST DISPOSAL AREA AS THE ONLY DOCUMENTED ON-SITE SOURCE OF TCE IS NOT CORRECT. TCE WAS DETECTED IN 6 OF 41 SOIL VAPOR SAMPLES AND ONE SOIL/WASTE SAMPLE AT THE MELBY ROAD SITE. TCE HAS BEEN DETECTED IN DOWNGRADIENT MONITORING WELLS AT THE MELBY ROAD SITE, ALTHOUGH AT CONCENTRATIONS SIGNIFICANTLY LOWER THAN IN PRIVATE WELL SAMPLES WITHIN PLUME 4. TCE WAS ALSO RECENTLY DETECTED IN NEW MONITORING WELLS IN THE SOUTHWESTERN PORTION OF THE SITE, ALTHOUGH THE MOST RECENT GROUNDWATER DATA WAS NOT AVAILABLE AT THE TIME OF EDER'S COMMENT.

SEH

COMMENT: THE PFS MISREPRESENTS OPERATION AND MAINTENANCE COSTS FOR THE DISTRICT. ON DECEMBER 14, 1989, PRIOR TO RELEASE OF THE PFS, THE DISTRICT FORWARDED TO NPI THE OPERATION AND MAINTENANCE COST ESTIMATE OF \$48,200 PER YEAR. WHEN WRITING THE ALTERNATIVES COMPARISON, NPI ELECTED TO USE A COST ESTIMATE OF \$120,000 PER YEAR WHICH WAS PROVIDED BY AYRES ASSOCIATES WITH A DOCUMENTED LIST OF ASSUMPTIONS AS THE BASIS FOR THIS EXTREMELY HIGH ESTIMATE. ALTHOUGH NPI HAD BOTH OPERATION AND MAINTENANCE COST ESTIMATES, IT CHOSE TO USE \$120,000 FOR OBVIOUS BIASED REASONS WHICH HAS LED TO SIGNIFICANT MISUNDERSTANDING AMONG AFFECTED PARTIES OF THE DISTRICT.

IN TABLE 10 ON PAGE 79 OF THE PFS, THE OPERATION AND MAINTENANCE COST FOR THE DISTRICT IS PRESENTED AS \$120,000. WE HEREIN REQUEST THAT THE SELF-SERVING ESTIMATE OF \$120,000 BE REMOVED AND THAT THE DISTRICT'S OPERATION AND MAINTENANCE ESTIMATE OF \$48,200 BE INSERTED IN THIS TABLE. US EPA RESPONSE: THE OPERATION AND MAINTENANCE COST ESTIMATES PRESENTED IN THE PFS FOR THE DISTRICT WERE PREPARED BY AYRES ASSOCIATES, A LOCAL ENGINEERING FIRM PRESUMABLY FAMILIAR WITH COMMUNITY WATER SYSTEMS IN THE STATE OF WISCONSIN, INCLUDING MINIMUM DESIGN STANDARDS SET BY STATE CODES AND OPERATION AND MAINTENANCE REQUIREMENTS AND COSTS. FOR COMPARISON PURPOSES, THE PROPOSED PLAN USED THE OPERATION AND MAINTENANCE COSTS PRESENTED IN THE PFS BUT ALSO ACKNOWLEDGED THE COST ESTIMATES PREPARED BY THE DISTRICT IN ITS DECEMBER 4, 1989 APPLICATION TO THE PSC. AT THE PSC HEARING ON FEBRUARY 19, 1990, THE PSC PROVIDED PRELIMINARY ANNUAL REVENUE REQUIREMENTS OF APPROXIMATELY \$80,000 WHICH US EPA BELIEVES IS THE MOST RELIABLE ESTIMATE OF ANNUAL OPERATION AND MAINTENANCE COSTS. THE PSC ESTIMATE OF \$80,000 WAS INCORPORATED INTO THE ROD AS THE PROJECTED COSTS FOR THE SELECTED REMEDY.

COMMENT: THROUGH THE PFS, NPI CONTINUALLY SUGGESTS THAT A HIGH PERCENTAGE (EXAMPLE, PAGE 11, 22 PERCENT) OF THE DISTRICT DOES NOT EXIST. THE IMPACT OF THESE INACCURATE ASSUMPTIONS GREATLY BIASES THE COST ESTIMATES AND ALTERNATIVE COMPARISONS THROUGHOUT ALL SECTIONS OF THE PFS (EXAMPLES, PAGES 11, 12, 15, 17, 31, AND 35 THROUGH 82). THE ISSUE IS FURTHER UTILIZED ON PAGE 43 TO SUGGEST THAT THE DISTRICT WITH DECLINING USERS, WOULD INCUR A USER CHARGE EVEN HIGHER THAN THE INACCURATE COST PRESENTED. WE HEREIN REQUEST THAT THE DISTRICT BE RECOGNIZED AS FORMED AND THAT THE TOTAL DISTRICT BE PROPERLY EVALUATED AS A VIABLE ALTERNATIVE.

US EPA RESPONSE: THE PERCENTAGES OF THE AFFECTED AREA TO BE SERVICED BY EAU CLAIRE AND THE DISTRICT AND CORRESPONDING COST ESTIMATES WERE BASED ON CONDITIONS THAT EXISTED AT THE TIME THE PFS WAS PREPARED AND IN RESPONSE TO US EPA'S OCTOBER 13, 1989 TEMPORARY "FREEZE" OF THE JURISDICTIONAL BOUNDARIES WITHIN THE AFFECTED AREA. THE EVALUATION OF ALTERNATIVES BY NPI AND THE SELECTION OF A PREFERRED ALTERNATIVE BY US EPA ASSUMED

THE ANNEXATION PETITIONS FILED WITH THE CITY OF EAU CLAIRE ON OR BEFORE OCTOBER 13, 1989 WOULD BE SUBSEQUENTLY ADOPTED BY THE CITY COUNCIL AND NOT RENDERED VOID BY THE CHIPPEWA COUNTY CIRCUIT COURT. THESE ANNEXED PARCELS, WHICH COMPRISE APPROXIMATELY 22 PERCENT OF THE AFFECTED AREA, WOULD THEN BE SERVICED BY EAU CLAIRE.

THE DISCUSSION ON PAGE 43 DOES NOT SUGGEST THAT THE DISTRICT WOULD INCUR A HIGHER USER CHARGE WITH DECLINING CUSTOMERS. IT SIMPLY STATES: "IF THE NUMBER OF USERS IS REDUCED BECAUSE THE AREA RECEIVES WATER FROM OTHER SOURCES, OPERATION AND MAINTENANCE COSTS WOULD BE LESS BUT THEY WOULD BE BORNE BY FEWER USERS. AS FIXED COSTS WOULD NOT DECLINE WITH THE USER BASE, THE COST OF DELIVERED WATER PER CUSTOMER WILL INCREASE...." US EPA BELIEVES THIS TO BE A REASONABLE CONCLUSION.

BASED ON THE PSC'S PRELIMINARY COST ESTIMATES, IT IS APPARENT THAT OPERATION AND MAINTENANCE COSTS FOR THE DISTRICT PREPARED BY NPI WERE OVERESTIMATED; HOWEVER, THE OPERATION AND MAINTENANCE COSTS PROJECTED BY THE DISTRICT WERE SIGNIFICANTLY UNDERESTIMATED. FINALLY, THE DISTRICT HAS ALWAYS BEEN RECOGNIZED BY US EPA AS A VIABLE ALTERNATIVE AS DOCUMENTED BY THE PROPOSED PLAN AND ROD.

COMMENT: THE SCHEDULE FOR OPERATION OF THE DISTRICT IS PRESENTED IN TABLE 4 OF THE PFS TO CONVEY THAT IT IS NOT POSSIBLE TO HAVE SERVICE ON-LINE IN 1990. AS THE PROJECT IS ON SCHEDULE, WE HEREIN REQUEST THAT THE DISTRICT'S REMEDIATION OF THE PROBLEM BE RESTATED AS A 1990 REALITY AND THAT THE STATUS OF THE DISTRICT WATER SOURCE, WATER STORAGE FACILITY AND SYSTEM DESIGN AS PRESENTED TO US EPA ON DECEMBER 4, 1989, BECOME A PART OF THE RECORD.

ON PAGE 41 OF THE PFS, THE AUTHOR SUGGESTS THAT THE DEADLINE FOR PSC APPROVAL "HAS SLIPPED BY SEVERAL MONTHS." THIS IS UNTRUE AND THE PROJECT REMAINS ON SCHEDULE FOR 1990 CONSTRUCTION AND OPERATION.

US EPA RESPONSE: THE SCHEDULE IN THE PFS WAS PREPARED BY NPI AND ITS CONSULTANT AND THE DISTRICT'S IMPLEMENTATION SCHEDULE WAS INDEPENDENTLY PREPARED BY THE DISTRICT AND ITS PROJECT ENGINEER, BOTH WITHOUT INPUT FROM US EPA. THESE SCHEDULES WERE BASED ON THE DISTRICT'S AND NPI'S INTERPRETATIONS OF WISCONSIN'S ADMINISTRATIVE REQUIREMENTS AND THE TIME REQUIRED TO FULFILL THESE OBLIGATIONS. US EPA HAS NEVER CONCURRED WITH EITHER SCHEDULE; HOWEVER, THE AGENCY HAS UNTIL RECENTLY, REMAINED HOPEFUL FOR AN "ON-LINE" SYSTEM IN 1990. THE SCHEDULE HAS BEEN DELAYED SEVERAL MONTHS WHILE AWAITING THE DECISION FROM THE PSC WHICH JEOPARDIZES A 1990 CONSTRUCTION SCHEDULE. THE TIMELY IMPLEMENTATION OF THE DISTRICT DEPENDS ON THE WILLINGNESS OF THE RESPONSIBLE PARTIES TO FUND THE DESIGN AND CONSTRUCTION, AND THE AVAILABILITY OF FEDERAL FUNDS IN THE EVENT US EPA UNDERTAKES THE REMEDIAL ACTION. IF THE DISTRICT IS DETERMINED TO HAVE A CENTRAL DISTRIBUTION SYSTEM CONSTRUCTED AND OPERATIONAL BY THE END OF 1990, IT MAY PROCEED ON ITS OWN WITH THE UNDERSTANDING THAT THERE WILL BE NO REIMBURSEMENT FROM US EPA FOR UNAUTHORIZED EXPENDITURES BY THE DISTRICT, AS PREVIOUSLY EXPLAINED IN AN OCTOBER 1989 LETTER FROM THE AGENCY TO HALLIE AND EAU CLAIRE OFFICIALS.

THE REFERENCE TO PAGE 41 OF THE PFS IS NO LONGER RELEVANT BECAUSE THE PSC ORDER WAS NOT ISSUED UNTIL JUNE 13, 1990.

COMMENT: THE AUTHOR CONCLUDES THAT A CHANGE IN POLITICAL JURISDICTION "IS A LOGICAL OPTION." WHEN SEH PERSONNEL CONDUCTED DOOR TO DOOR INTERVIEWS TO DETERMINE THE DESIRED WATER SERVICE LOCATION OF EACH FACILITY IN THE DISTRICT, 93 PERCENT OF THOSE CONTACTED SUPPORTED THE HALLIE PROJECT. WE REQUEST THAT THIS EDITORIAL COMMENT BE STRUCK FROM THE RECORD AND THAT THE UNANIMOUS SUPPORT FOR THE DISTRICT BE INCLUDED AS FACT.

US EPA RESPONSE: THE PREFERRED REMEDY IN THE PROPOSED PLAN AND THE SELECTED REMEDY IN THE ROD ACKNOWLEDGE THE SUPPORT FOR THE DISTRICT. WRITTEN AND ORAL COMMENTS RECEIVED DURING THE PUBLIC COMMENT PERIOD ARE ALSO PART OF THE ADMINISTRATIVE RECORD AND CAN BE REVIEWED BY ANY INTERESTED PARTY TO GAUGE SUPPORT FOR THE VARIOUS ALTERNATIVES DISCUSSED IN THE PROPOSED PLAN AND PFS.

COMMENT: WE HEREIN REQUEST THAT THE FOLLOWING CONCLUSIONS IN SECTIONS 4.3.7 AND 4.4 OF THE PFS BE CORRECTLY STATED:

- 1) SECTION 4.3.7 - THE DISTRICT MUST BE RECOGNIZED AS FORMED AND BE CONSIDERED AS SUCH IN THE ENTIRE PFS.
- 2) SECTION 4.4 - PREFERRED ALTERNATIVE. ADD THE DISTRICT TO THIS LIST.

3) PAGE 83 - THIS DISCUSSION DOES NOT CONSIDER THE DISTRICT AS A UTILITY.

US EPA RESPONSE:

1) US EPA HAS ALWAYS RECOGNIZED THE CREATION OF THE DISTRICT. US EPA REQUIRED NPI TO MODIFY THE DRAFT PFS SUBMITTED IN AUGUST 1989 TO REFLECT THE NEWLY FORMED DISTRICT AS A VIABLE ALTERNATIVE. USEPA IDENTIFIED THE DISTRICT AS A COMPONENT OF BOTH THE PREFERRED REMEDY IN THE PROPOSED PLAN AND THE SELECTED REMEDY IN THE ROD.

2) THE DISTRICT AS THE SOLE PROVIDER OF DRINKING WATER TO THE AFFECTED AREA WAS NOT ONE OF THE ALTERNATIVES EVALUATED IN THE PFS OR US EPA'S PROPOSED PLAN DUE TO THE ANNEXATION OF SEVERAL PARCELS WITHIN THE AFFECTED AREA TO THE CITY OF EAU CLAIRE. FOR THIS REASON, THE PREFERRED REMEDY IN THE PROPOSED PLAN WAS A DUAL SERVICE ALTERNATIVE. THE ROD DETAILS THE FINAL REMEDY AND THE RATIONALE FOR ITS SELECTION. US EPA BELIEVES THE SELECTED REMEDY, ALTERNATIVE 2, IS THE ONLY IMPLEMENTABLE ALTERNATIVE TO PROVIDE A PERMANENT AND SAFE DRINKING WATER SUPPLY TO THE ENTIRE AFFECTED AREA IN A TIMELY MANNER.

3) NPI EVALUATED POTENTIAL REMEDIAL ALTERNATIVES PURSUANT TO US EPA POLICY AND GUIDANCE. BY UNDERTAKING THE PFS, IT WAS NPI'S DISCRETION TO SELECT ITS OWN PREFERRED REMEDY. THE DISCUSSION ON PAGE 83 IS PRESENTED IN SUPPORT OF NPI'S PREFERRED ALTERNATIVE (ALTERNATIVE 4), INDIVIDUAL HOME AND BUSINESS TREATMENT UNITS, AND IS NOT INTERPRETED AS LACK OF CONSIDERATION FOR THE DISTRICT. THE COMMENTOR IS REFERRED TO PAGES 9 AND 10 OF THE ADDENDUM TO THE PFS PREPARED BY US EPA, IN CONSULTATION WITH WDNR, FOR US EPA'S COMMENTS ON SECTIONS 4.3.7 AND 4.4 OF THE PFS.